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DEQ-NRO

LAND APPLICATION SITE

ROBERT F. UPSHAW

CRRFU 1-28

CAROLINE COUNTY

RECYC SYSTEMS, INC

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 7-27-10 between R.D. UPSHAW, referred to here as "landowner", and Recyc Systems, Inc. referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number _____ which is held by the Permittee.

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health:

1. Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
2. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation. Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
3. Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days. Other animals should be restricted from grazing for 30 days;
4. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site;
5. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).
6. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

The landowner agrees to allow county officials access to the area of the property permitted for biosolids, whenever necessary, to complete site inspections related to the scheduled biosolids program.

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner Signature:

R. D. Upshaw
R. D. Upshaw
Virginia Upshaw

Farm Operator Signature:

R. D. Upshaw
R. D. Upshaw

Permittee:

Recyc Systems, Inc.

Mailing Address:

225500 Gethers Ln.
Millwood, Va. 22514

Mailing Address:

225500 Gethers Ln.
Millwood, Va. 22514

Mailing Address:

P.O. Box 562
Remington Virginia 22734
(540) 547-3300

RECYC SYSTEMS, INC

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

Farming Assoc. Inc

This biosolids application agreement is made on 10-8-10 between Robert F. Upshaw, Jr., referred to here as "landowner", and Recyc Systems, Inc., referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number _____ which is held by the Permittee.

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Landowner Signature:

ROBERT F. UPSHAW Jr.
Farming Assoc. Inc.

Mailing Address:

25500 Gether Ln.
Milford, Va. 22514

Phone:

Mailing Address:

25500 Gether Ln.
Milford, Va. 22514

Phone:

Mailing Address:

P.O. Box 562
Remington Virginia 22734
(540) 547-2300

Farm Operator Signature:

R. D. Upshaw

Permittee:

Recyc Systems, Inc.

RECYC SYSTEMS, INC

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 10-8-10 between R.D. UPSHAW et al's, referred to here as "landowner", and Recyc Systems, Inc, referred to here as the "Permittee".

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Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner Signature:

Jodie D Gray
Diane Upshaw
R.D. Upshaw
Dale Seale

Farm Operator Signature:

R.D. Upshaw

Mailing Address:

25500 Gether Ln.
Milford, Va. 22514

Phone:

Mailing Address:

25500 Gether Ln.
Milford, Va. 22514

Phone:

Mailing Address:

P.O. Box 562
Remington Virginia 22734
(540) 547-3300

Permittee:

Recyc Systems, Inc.

RECYC SYSTEMS, INC
FIELD DATA SHEET

Field	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Bed Rock/Shallow	Water Table	Surf/Leach	Freq Flood			
CRRFU 1	13.0	--	--	--	--	YO 53	TM 99 P 7	T1242
CRRFU 2	7.4	--	--	--	--	YO 50	TM 99 P 3	T1208
CRRFU 3	8.4	12A	--	--	--	YO 50	TM 99 P 3	T1208
CRRFU 4	9.4	--	--	--	--	YO 50	TM 99 P 3	T1208
CRRFU 5	26.0	1A, 12A	--	--	--	YO 50	TM 99 P 3	T1208
CRRFU 6	9.8	--	--	--	--	YO 50	TM 99 P 4	T1208
CRRFU 7	12.5	--	--	--	--	YO 50	TM 99 P 4	T1208
CRRFU 8	10.2	--	--	--	--	YO 50	TM 99 P 4	T1208
CRRFU 9	20.4	--	--	--	--	YO 50	TM 99 P 4	T1208
CRRFU 10	14.2	1A	--	5A	--	YO 50	TM 99 P 4	T1208
CRRFU 11	68.5	--	--	5B, 25B	--	YO 50	TM 99 P 4	T2803
CRRFU 12	25.1	8A	--	--	--	YO 50	TM 99 P 4	T1208
CRRFU 13	24.1	4A, 8A	--	4A	--	YO 50	TM 99 P 4	T1208
CRRFU 14	14.6	1A	--	5B	--	YO 50	TM 99 P 4	T1208
CRRFU 15	14.4	--	--	--	--	YO 50	TM 99 P 4, 5	T2804
CRRFU 16	22.7	--	--	--	--	YO 50	TM 99 P 5	T2804
CRRFU 17	24.6	--	--	--	--	YO 50	TM 99 P 5	T2804

RECYC SYSTEMS, INC
FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
CRRFU 18	14.7	--	--	--	--	Y050	TM 99 P 5,5A	T 2804
CRRFU 19	20.5	1A	--	5B	--	Y050	TM 99 P 5	T 2804
CRRFU 20	39.1	--	--	--	--	Y053	TM 99 P 5	T 2804
CRRFU 21	64.6	--	--	--	--	Y053	TM 99 P 5	T 2804
CRRFU 22	9.1	--	--	--	--	Y053	TM 99 P 5	T 2804
CRRFU 23	4.6	--	--	--	--	Y050	TM 99 P 5	T 2804
CRRFU 24	30.2	1A	--	5B	--	Y050	TM 99 P 5	T 2804
CRRFU 25	32.5	1A	--	5B	--	Y050	TM 99 P 5	T 2804
CRRFU 26	28.2	1A	--	--	--	Y053	TM 99 P 5	T 2804
CRRFU 27	39.4	1A,26A	--	5B	--	Y050	TM 99 P 5	T 2804
CRRFU 28	13.8	4A	--	4A,5B	--	Y0 50 YO 53	TM 99 P 5	T 2804
TOTAL ACRES IN SITE		622.0						

Recyc Systems, Inc

Robert Upshaw Site

County	Owner	Operator	FSA Tract No.	Recyc Field No.	Gross Acres	Date of Last Application
Caroline	Robert D. Upshaw, Robert D. Upshaw, Jackie D. Gray, Diane Leite, and Virginia D. Leite	R.D. Upshaw	T 1242 F 1,2	CRRFU 1	13.0	Info Unavailable
			T 1208 F 1	CRRFU 2	7.4	Info Unavailable
			T 1208 F 2	CRRFU 3	8.4	Info Unavailable
			T 1208 F 3	CRRFU 4	9.4	Info Unavailable
			T 1208 F 7,8,11,12	CRRFU 5	26.0	Info Unavailable
			T 1208 F 4	CRRFU 6	9.8	Info Unavailable
			T 1208 F 5,6	CRRFU 7	12.5	Info Unavailable
			T 1208 F 10	CRRFU 8	10.2	Info Unavailable
			T 1208 F 9,13	CRRFU 9	20.4	Info Unavailable
			T 1208 F 14	CRRFU 10	14.2	Info Unavailable
			T 1208 F 16,24 T 2803 F 1	CRRFU 11	68.5	Info Unavailable
			T 1208 F 18	CRRFU 12	25.1	Info Unavailable
			T 1208 F 19-22	CRRFU 13	24.1	Info Unavailable
			T 1208 F 17	CRRFU 14	14.6	Info Unavailable
	Robert D. Upshaw et als, Robert F. Upshaw, Jr. & Farming Assoc. Inc		T 1208 F 15	CRRFU 15	14.4	Info Unavailable
			T 2804 F 10			
	Robert F. Upshaw, Jr. Farming Assoc. Inc		T 2804 F 6	CRRFU 16	22.7	Info Unavailable
			T 2804 F 3,8	CRRFU 17	24.6	Info Unavailable

Recyc Systems, Inc

Robert F. Upshaw Site

County	Owner	Operator	FSA Tract No.	Recyc Field No.	Gross Acres	Date of Last Application
Caroline	Robert F. Upshaw Jr Farming Assoc. Inc	R.D. Upshaw	T 2804 F 7,11	CRRFU 18	14.7	Info Unavailable
	Robert F and Virginia L. Upshaw		T 2804 F 18	CRRFU 19	20.5	Info Unavailable
	Robert F. Upshaw Jr Farming Assoc. Inc		T 2804 F 1, 2	CRRFU 20	39.1	Info Unavailable
			T 2804 F 4	CRRFU 21	64.6	Info Unavailable
			T 2804 F 9	CRRFU 22	9.1	Info Unavailable
			T 2804 F 13	CRRFU 23	4.6	Info Unavailable
			T 2804 F 19	CRRFU 24	30.2	Info Unavailable
			T 2804 F 14,15	CRRFU 25	32.5	Info Unavailable
			T 2804 F 5	CRRFU 26	28.2	Info Unavailable
			T 2804 F 16	CRRFU 27	39.4	Info Unavailable
			T 2804 F 17	CRRFU 28	13.8	Info Unavailable

Report Number: 10-292-0715
 Account Number: 70594

Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701



www.aleastern.com

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Submitted By: NED UPSHAW
 Grower: R.F. UPSHAW
 Farm ID:
 CAROLINE CO.

SOIL ANALYSIS REPORT

Date Received: 10/19/2010

Date Of Analysis: 10/20/2010

Date Of Report: 10/21/2010

Analytical Method(s):
 Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity		C.E.C.
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Reserve ppm	K ppm	Mg Rate	Mg ppm	Ca Rate	Ca ppm	Na Rate	Na ppm	Soil pH	Buffer Index	H meq/100g	H meq/100g	
CRRFU 1	08797	1.6	L	76	38	M	117	H	129	H	522	M			6.7	6.91	0.2	4.2
CRRFU 2	08798	2.2	L	86	111	H	59	L	62	L	885	H			6.2	6.86	0.7	5.8
CRRFU 3	08799	1.6	L	79	43	M	35	VL	48	H	230	L			5.4	6.87	0.6	2.3
CRRFU 4	08800	2.0	L	86	21	L	246	VH	43	M	180	L			5.4	6.86	0.7	2.6
CRRFU 5A	08801	2.0	L	82	107	H	72	L	57	L	739	M			5.7	6.81	1.2	5.5
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Aluminum
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	ppm	SS ms/cm	Cl ppm	Cl ppm	Al ppm	
CRRFU 1	7.1	25.6	62.1		4.5													
CRRFU 2		2.6	8.9	76.3		12.1												
CRRFU 3		3.9	17.4	50.0		28.2												
CRRFU 4		24.3	13.8	34.6		28.7												
CRRFU 5A		3.4	8.6	67.2		21.1												

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR = Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (millimhos per centimeter), meq/100g (milliequivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.
 Analysis prepared by: A&L Eastern Laboratories, Inc.

by *Pauric McGroarty*

Paulic McGroarty

Report Number: 10-292-0715
 Account Number: 70594



Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-5446

www.aleastern.com

Date Received: 10/19/2010
 Date Of Report: 10/21/2010
SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 1	Adjust pH to 6.5	0	0.0					0					
CRRFU 2	Adjust pH to 6.5	0	1.0					18					
CRRFU 3	Adjust pH to 6.5	0	1.5					32					
CRRFU 4	Adjust pH to 6.5	0	1.5					37					
CRRFU 5A	Adjust pH to 6.5	0	1.3					23					

Comments:

Sample(s) CRRFU 2, CRRFU 3, CRRFU 4, CRRFU 5A:

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 2, CRRFU 4, CRRFU 5A:

Apply dolomitic lime to raise pH and improve the magnesium level.

Sample(s) CRRFU 3:

This soil is very sandy and subject to heavy leaching loss of nutrients such as nitrogen, sulfur and boron . To minimize loss, make sure apply these leachable nutrients close to planting time in the Spring or when plants start to grow. Split application if possible.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroarty

Pauric McGroarty



www.aleastern.com

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 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Submitted By: NED UPSHAW
Farm ID:
 R.F. UPSHAW
 CAROLINE CO.

SOIL ANALYSIS REPORT

Date Of Report: 10/21/2010

Date Received: 10/19/2010

Date Of Analysis: 10/20/2010

Analytical Method(s):
Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity		
		%	Rate	ENR Ibs/A	Mehlich 3 ppm	Reserve ppm	K ppm	Mg Rate	Mg ppm	Ca Rate	Ca ppm	Na Rate	Na ppm	Soil pH	Buffer Index	H meq/100g	C.E.C.	
CRRFU 5B	08802	1.4	L	67	113	H		137	H	75	L	660	L		4.8	6.56	3.7	8.0
CRRFU 6	08803	1.6	L	73	215	VH		82	L	59	L	1182	VH		7.0		0.0	6.6
CRRFU 7	08804	1.4	L	70	153	VH		75	L	46	L	834	H		6.2	6.86	0.7	5.4
CRRFU 8	08805	1.1	L	64	191	VH		72	L	63	L	973	H		6.7	6.90	0.3	5.8
CRRFU 9	08806	1.2	L	68	205	VH		104	H	54	M	509	M		5.8	6.85	0.8	4.0
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	ppm	SS ms/cm	Cl ppm	Aluminum	Chloride	
CRRFU 5B	4.4	7.8	41.3	46.6														
CRRFU 6	3.2	7.4	89.5		0.0													
CRRFU 7	3.6	7.1	77.2		12.1													
CRRFU 8	3.2	9.1	83.9		4.5													
CRRFU 9	6.7	11.3	63.6		19.2													

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Darice M. Geary*

Paulie McGroarty

Report Number: 10-292-0715
 Account Number: 70594



www.aaleastern.com

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

Submitted By: NED UPSHAW
 Grower: R.F. UPSHAW
 Farm ID:
 CAROLINE CO.

Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

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CRRFU 5B	Adjust pH to 6.5	0	2.8					5					
CRRFU 6	Adjust pH to 6.5	0	0.0					21					
CRRFU 7	Adjust pH to 6.5	0	1.0					34					
CRRFU 8	Adjust pH to 6.5	0	0.0					17					
CRRFU 9	Adjust pH to 6.5	0	1.3					26					

Comments:

Sample(s) CRRFU 5B, CRRFU 7, CRRFU 9:

Apply dolomitic lime to raise pH and improve the magnesium level.
 If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 6, CRRFU 8:

Apply required magnesium with magnesium oxide, Epsom Salts, K-Mag or Sul-Po-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulie McGroarty

Paulie McGroarty

Page 5 of 14
 Report Number: 10-292-0715
 Account Number: 70594



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 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

www.aeleastern.com

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Submitted By: NED UPSHAW
 Farm ID:

Grower: R.F. UPSHAW
 CAROLINE CO.

SOIL ANALYSIS REPORT

Date Received: 10/19/2010

Date Of Analysis: 10/20/2010

Date Of Report: 10/21/2010

Analytical Method(s):
 Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity			
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	ppm	Reserve Rate	ppm	Mg Rate	ppm	Ca Rate	ppm	Na Rate	ppm	Soil pH	Buffer Index	H meq/100g	
CRRFU 10	08807	1.7	L	80	107	H	40	VL	60	H	288	L			5.2	6.82	1.1	3.1	
CRRFU 11A	08808	1.3	L	69	255	VH	60	L	68	M	818	H			6.8	6.92	0.1	5.0	
CRRFU 11B	08809	1.3	L	69	248	VH	67	M	72	M	756	H			6.8	6.92	0.1	4.7	
CRRFU 11C	08810	1.4	L	71	239	VH	59	L	66	M	770	H			7.0		0.0	4.6	
CRRFU 12	08811	1.3	L	66	131	VH	121	M	67	L	1113	H			6.4	6.87	0.6	7.1	
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride	
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ ppm	Rate	S ppm	Rate	Zn ppm	Rate	Mn ppm	Rate	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
CRRFU 10	3.3	16.1	46.5		34.1														
CRRFU 11A	3.1	11.3	81.8		2.9														
CRRFU 11B	3.7	12.8	80.4		2.9														
CRRFU 11C	3.3	12.0	83.7		0.0														
CRRFU 12	4.4	7.9	78.4		8.9														

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (millimhos per centimeter), meq/100g (milliequivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.
 by: *Pause* *McGeorge*
 Analysis prepared by: A&L Eastern Laboratories, Inc.

Paulic McGroarty

Report Number: 10-292-0715
 Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 10	Adjust pH to 6.5	0	1.5						20				
CRRFU 11A	Adjust pH to 6.5	0	0.0						12				
CRRFU 11B	Adjust pH to 6.5	0	0.0						8				
CRRFU 11C	Adjust pH to 6.5	0	0.0						14				
CRRFU 12	Adjust pH to 6.5	0	0.8						13				

Comments:

Sample(s) CRRFU 10, CRRFU 12:

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 11A, CRRFU 11B, CRRFU 11C:

Apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 12:

Apply dolomitic lime to raise pH and improve the magnesium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."
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Paulie McGroarty

Paulie McGroarty



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 CULPEPER VA 22701

A&L Eastern Laboratories, Inc.

7821 Whitepine Road Richmond, Virginia 23237 (804) 743-3401 Fax (804) 271-6446

Submitted By: NED UPSHAW
Farm ID:

Grower:
 R.F. UPSHAW
 CAROLINE CO.

SOIL ANALYSIS REPORT

Date Of Report: 10/21/2010

Date Received: 10/19/2010

Date Of Analysis: 10/20/2010

Analytical Method(s):
 Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Buffer Index		Acidity		C.E.C.		
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	ppm	K	ppm	Mg	ppm	Ca	ppm	Na	ppm	pH	H	meq/100g	meq/100g			
CRRFU 25	08828	1.6	L	73	216	VH		172	H	50	L	777	M					5.7	6.80	1.3	6.0	
CRRFU 26	08829	1.6	L	74	102	H		109	M	56	L	876	H					6.7	6.91	0.2	5.4	
CRRFU 27A	08830	1.5	L	71	285	VH		178	H	99	M	998	H					6.8	6.91	0.2	6.5	
CRRFU 27B	08831	1.3	L	69	157	VH		110	M	102	H	686	M					6.3	6.88	0.5	5.1	
CRRFU 28	08833	1.6	L	74	330	VH		176	H	93	M	771	M					6.2	6.86	0.7	5.8	
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride		Aluminum		
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ ppm	S Rate	Zn ppm	Mn Rate	Fe ppm	Cu Rate	B ppm	ppm	SS Rate	Cl ppm	Rate	Cl ppm	Rate	Al ppm			
CRRFU 25	7.4	6.9	64.8		21.1																	
CRRFU 26	5.2	8.6	81.1		4.5																	
CRRFU 27A	7.0	12.7	76.8		2.9																	
CRRFU 27B	5.5	16.7	67.3		10.6																	
CRRFU 28	7.8	13.4	66.5		12.1																	

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ins/cm (millimhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm × 2 = lbs/A, Soluble Salts ms/cm × 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.
 Analysis prepared by: A&L Eastern Laboratories, Inc.

Submitted By: Ned Upshaw
 Farm ID:
 by: Paulie McGroary

Paulie McGroary

Report Number: 10-292-0715
 Account Number: 70594



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A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

Submitted By: NED UPSHAW
 Farm ID:
 Grower: R.F. UPSHAW
 CAROLINE CO.

Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 25	Adjust pH to 6.5	0	1.5					30					
CRRFU 26	Adjust pH to 6.5	0	0.0					24					
CRRFU 27A	Adjust pH to 6.5	0	0.0					0					
CRRFU 27B	Adjust pH to 6.5	0	0.8					0					
CRRFU 28	Adjust pH to 6.5	0	1.0					0					

Comments:

Sample(s) CRRFU 25, CRRFU 28:

Apply dolomitic lime to raise pH and improve the magnesium level.

Sample(s) CRRFU 25:

If dolomitic lime is not used, apply required magnesium with magnesium oxide, Epsom Salts, K-Mag or Sul-PO-Mag.

Sample(s) CRRFU 26:

Apply required magnesium with magnesium oxide, Epsom Salts, K-Mag or Sul-PO-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulic McGroarty

Paulic McGroarty



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 8455 WHITESHOP RD
 CULPEPER VA 22701

A&L Eastern Laboratories, Inc.

7621 Whiteline Road Richmond, Virginia 23237 (804) 743-5401 Fax (804) 271-5446

Submitted By: NED UPSHAW
 Farm ID:
 R.F. UPSHAW
 CAROLINE CO.

Date Received: 10/19/2010 Date Of Analysis: 10/20/2010

SOIL ANALYSIS REPORT
 Date Of Report: 10/21/2010

Analytical Method(s):
 Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity		C.E.C.
		%	Rate	ENR Ibs/A	Mehlich 3 ppm	Rate	ppm	Mg Rate	ppm	Ca Rate	ppm	Na Rate	ppm	Soil pH	Buffer Index	H meq/100g	meq/100g	
CRRFU 18	08817	1.5	L	74	77	H		101	H	75	M	604	H		6.4	6.89	0.4	4.3
CRRFU 19	08818	1.5	L	74	93	H		73	M	47	L	684	H		6.6	6.90	0.3	4.3
CRRFU 20A	08819	2.0	L	79	97	H		124	M	73	L	1352	VH		7.2		0.0	7.7
CRRFU 20B	08820	1.6	L	75	61	H		136	H	47	L	647	H		6.1	6.87	0.6	4.6
CRRFU 21A	08822	1.6	L	75	92	H		75	M	60	L	855	H		6.9	6.92	0.1	5.0
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn Rate	ppm	Mn Rate	ppm	Fe Rate	ppm	B ppm	Rate	SS ms/cm	Cl ppm	Aluminum
CRRFU 18	6.0	14.5	70.2		8.9													
CRRFU 19	4.4	9.1	79.5		5.9													
CRRFU 20A	4.1	7.9	87.8		0.0													
CRRFU 20B	7.6	8.5	70.3		13.7													
CRRFU 21A	3.8	10.0	85.5		1.4													

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. CNR - Estimated Nitrogen Release Capacity. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (millimhos per centimeter), meq/100g (milliequivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.
 Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Pawee McGroary*

Pauric McGroary

Report Number: 10-292-0715
 Account Number: 70594



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 8455 WHITESHOP RD
 CULPEPER VA 22701

A&L Eastern Laboratories, Inc.

7621 Whitepine Road, Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Submitted By: NED UPSHAW
 Farm ID:
 R.F. UPSHAW
 CAROLINE CO.

Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 18	Adjust pH to 6.5	0	0.8					5					
CRRFU 19	Adjust pH to 6.5	0	0.0					33					
CRRFU 20A	Adjust pH to 6.5	0	0.0					7					
CRRFU 20B	Adjust pH to 6.5	0	1.0					33					
CRRFU 21A	Adjust pH to 6.5	0	0.0					20					

Comments:

Sample(s) CRRFU 18, CRRFU 20B:

Apply dolomitic lime to raise pH and improve the magnesium level.

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-PO-Mag.

Sample(s) CRRFU 19, CRRFU 20A, CRRFU 21A:

Apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-PO-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroarty

Pauric McGroarty

Report Number: 10-292-0715
 Account Number: 70594



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A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-3401 Fax (804) 271-5446

Submitted By: NED UPSHAW
 Grower: R.F. UPSHAW
 Farm ID: CAROLINE CO.

SOIL ANALYSIS REPORT

Date Received: 10/19/2010

Date Of Analysis: 10/20/2010

Analytical Method(s):
 Mehlich 3

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus			Potassium			Magnesium			Calcium			Sodium			pH			C.E.C. meq/100g				
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Reserve ppm	K ppm	Mg Rate	ppm	Ca Rate	ppm	Na Rate	ppm	Soil pH	Buffer Index	H meq/100g										
CRRFU 21B	08823	1.5	L	72	105	H		85	L	61	L	912	H			6.9	6.92	0.1					5.4			
CRRFU 21C	08824	1.3	L	70	80	H		76	M	47	L	699	H			6.9	6.92	0.1					4.1			
CRRFU 22	08825	1.2	L	68	60	H		93	H	54	L	710	H			6.6	6.90	0.3					4.5			
CRRFU 23	08826	1.5	L	71	257	VH		152	H	53	L	988	H			6.7	6.90	0.3					6.0			
CRRFU 24	08827	1.3	L	69	168	VH		84	M	61	M	750	H			6.4	6.89	0.4					4.9			
Percent Base Saturation		Nitrate			Sulfur			Zinc			Manganese			Iron			Copper			Boron			Chloride Salts			
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS Rate	Cl ppm	Al ppm										Aluminum	Chloride
CRRFU 21B	4.0	9.4	84.4		1.4																					
CRRFU 21C	4.8	9.6	85.2		1.4																					
CRRFU 22	5.3	10.0	78.9		5.9																					
CRRFU 23	6.5	7.4	82.3		4.5																					
CRRFU 24	4.4	10.4	76.5		8.9																					

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalents per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to samples tested. Samples are retained a maximum of thirty days after testing.

by: *Pauric McGroarty*
 by: *Pauric McGroarty*

Pauric McGroarty

Report Number: 10-292-0715
 Account Number: 70594



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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
 SUSAN TRUMBO
 8455 WHITESHOP RD
 CULPEPER VA 22701

Submitted By: NED UPSHAW
 Farm ID:
 Grower: R.F. UPSHAW
 CAROLINE CO.

Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 21B	Adjust pH to 6.5	0	0.0						19				
CRRFU 21C	Adjust pH to 6.5	0	0.0						33				
CRRFU 22	Adjust pH to 6.5	0	0.0						26				
CRRFU 23	Adjust pH to 6.5	0	0.0						27				
CRRFU 24	Adjust pH to 6.5	0	0.8						19				

Comments:

Sample(s) CRRFU 21B, CRRFU 21C, CRRFU 22, CRRFU 23:

Apply required magnesium with magnesium oxide, Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 24:

Apply dolomitic lime to raise pH and improve the magnesium level.

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulie McGeorge

Paulie McGroarty

Page 13 of 14
 Report Number: 10-292-0715
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Grower: R.F. UPSHAW
 Farm ID:
 CAROLINE CO.

Date Received: 10/19/2010 Date Of Analysis: 10/20/2010

Date Of Report: 10/21/2010

Analytical Method(s):
 Mehlich 3

SOIL ANALYSIS REPORT

Sample ID Field ID	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity		C.E.C. meq/100g			
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Reserve Rate ppm	K ppm	Mg Rate ppm	Ca Rate ppm	Mg Rate ppm	Ca Rate ppm	Na Rate ppm	Soil pH	Buffer Index	H meq/100g						
CRRFU 25	08828	1.6	L	73	216	V/H		172	H	50	L	777	M		5.7	6.80	1.3	6.0			
CRRFU 26	08829	1.6	L	74	102	H		109	M	56	L	876	H		6.7	6.91	0.2	5.4			
CRRFU 27A	08830	1.5	L	71	285	V/H		178	H	99	M	998	H		6.8	6.91	0.2	6.5			
CRRFU 27B	08831	1.3	L	69	157	V/H		110	M	102	H	686	M		6.3	6.88	0.5	5.1			
CRRFU 28	08833	1.6	L	74	330	V/H		176	H	93	M	771	M		6.2	6.86	0.7	5.8			
Percent Base Saturation		Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride		Aluminum	
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ ppm	S Rate ppm	Zn Rate ppm	Mn Rate ppm	Fe Rate ppm	Cu Rate ppm	B Rate ppm	SS Rate ms/cm	Cl Rate ppm	Al Rate ppm						
CRRFU 25	7.4	6.9	64.8		21.1																
CRRFU 26	5.2	8.6	81.1		4.5																
CRRFU 27A	7.0	12.7	76.8		2.9																
CRRFU 27B	5.5	16.7	67.3		10.6																
CRRFU 28	7.8	13.4	66.5		12.1																

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR = Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity,

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), msc/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to samples(s) tested. Samples are retained a maximum of thirty days after testing.
 Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paulie McGroarty*

Paulie McGroarty

Report Number: 10-292-0715
 Account Number: 70594



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Date Received: 10/19/2010
 Date Of Report: 10/21/2010

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
CRRFU 25	Adjust pH to 6.5	0	1.5						30				
CRRFU 26	Adjust pH to 6.5	0	0.0						24				
CRRFU 27A	Adjust pH to 6.5	0	0.0						0				
CRRFU 27B	Adjust pH to 6.5	0	0.8						0				
CRRFU 28	Adjust pH to 6.5	0	1.0						0				

Comments:

Sample(s) CRRFU 25, CRRFU 28:

Apply dolomitic lime to raise pH and improve the magnesium level.
Sample(s) CRRFU 25:
 If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-Po-Mag.

Sample(s) CRRFU 26:

Apply required magnesium with magnesium oxide, Epsom Salts, K-Mag or Sul-Po-Mag.

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Pauric McGroarty

Pauric McGroarty

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2010-Winter, 2014)
Robert F. Upshaw
Planner: Recyc Systems Inc

Tract: 1208 Location: Caroline
(N = N based, 1P = P based, 1.5P = P bassed at 1.5 removal, 0P = No P allowed)

Field CFSN /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/acre)	Leg Man Resid	Manure/Biosol Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
14/CRRFU 10(N)	14/14	2010	Hay/Pasture	120-40-200	0/0			120-40-200		N/A		
16,24/CRRFU 11(0P)	69/69	2010	Hay/Pasture	100-0-110	0/0			100-0-110		32		
18/CRRFU 12(1P)	25/25	2010	Hay/Pasture	120-0-160	0/0			120-0-160		48		
19-22/CRRFU 13(N)	24/24	2010	Hay/Pasture	100-40-110	0/0			100-40-110		N/A		
17/CRRFU 14(1P)	15/15	2010	Hay/Pasture	120-0-185	20/0			100-0-185		43		
15/CRRFU 15(N)	14/14	2010	Hay/Pasture	120-50-185	20/0			100-50-185		N/A		
1/CRRFU 2(N)	7/7	2010	Hay/Pasture	120-40-185	0/0			120-40-185		N/A		
2/CRRFU 3(N)	8/8	2010	Hay/Pasture	120-70-220	0/0			120-70-220		N/A		
3/CRRFU 4(N)	9/9	2010	Hay/Pasture	120-90-0	0/0			120-90-0		N/A		
7,8,11,12/CRRFU 5(N)	26/26	2010	Hay/Pasture	120-40-170	0/0			120-40-170		N/A		
4/CRRFU 6(1P)	10/10	2010	Hay/Pasture	120-0-170	20/0			100-0-170		40		
5,6/CRRFU 7(1P)	13/13	2010	Hay/Pasture	120-0-170	20/0			100-0-170		47		
10/CRRFU 8(1P)	10/10	2010	Hay/Pasture	120-0-170	20/0			100-0-170		44		
9,13/CRRFU 9(1P)	20/20	2010	Hay/Pasture	120-0-170	20/0			100-0-170		39		

Commercial Application Methods:

br - Broadcast
ba - Banded
sd - Sidedress

Notes:

Tract: 1242 Location: Caroline
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No./Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosold Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
1, 2/CRRFU 1(N)	13/13	2010	Hay/Pasture	120-80-160	20/0			100-80-160		N/A		

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 2804

Location: Caroline

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg Man Resid	Manure/Biosol Rate & Type (season)	T (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
6/CRRFU 16(N)	23/23	2010	Hay/Pasture	120-50-185	20/0			100-50-185		N/A		
3,8/CRRFU 17(N)	25/25	2010	Hay/Pasture	120-60-170	0/0			120-60-170		N/A		
7,11/CRRFU 18(N)	15/15	2010	Hay/Pasture	120-50-170	20/0			100-50-170		N/A		
18/CRRFU 19(N)	21/21	2010	Hay/Pasture	120-50-170	0/0			120-50-170		N/A		
1,2/CRRFU 20(N)	39/39	2010	Hay/Pasture	120-50-145	20/0			100-50-145		N/A		
4/CRRFU 21(N)	65/65	2010	Alfalfa (Hay) esttb.	0-80-130	0/0			0-80-130		N/A		
	2011		Alfalfa (hay), maint	0-40-170	0/0			0-120-300		N/A		
	2012	....		0-40-170	0/0			0-160-470		N/A		
	2013	....		0-40-170	0/0			0-200-640		N/A		
	2014	....		0-40-170	0/0			0-240-810		N/A		
9/CRRFU 22(N)	9/9	2010	Hay/Pasture	120-60-170	20/0			100-60-170		N/A		
13/CRRFU 23(0P)	5/5	2010	Hay/Pasture	100-0-55	0/0			100-0-55		37		
19/CRRFU 24(1P)	30/30	2010	Hay/Pasture	120-0-170	20/0			100-0-170		45		
14,15/CRRFU 25(1P)	33/33	2010	Hay/Pasture	120-0-90	20/0			100-0-90		42		
5/CRRFU 26(N)	28/28	2010	Hay/Pasture	120-40-160	0/0			120-40-160		N/A		
17/CRRFU 28(0P)	14/14	2010	Hay/Pasture	100-0-55	0/0			100-0-55		32		
16/CRRFU 27(1P)	39/39	2010	Hay/Pasture	100-0-85	0/0			100-0-85		33		

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

THE PLANNER IS NOT STATE CERTIFIED

Robert F. Upshaw Narrative

This is Robert F. Upshaw farm located in Caroline County. The farm consists of bean, corn and hay/pasture fields.

This is a partial plan written for the purpose of obtaining a biosolids permit. Biosolids application has not been shown since it is uncertain when a permit will be obtained. The partial plan will be revised prior to biosolids application to obtain a target biosolids application rate.

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
1208	CRRFU 10	14	2010-Fa	H+ (107 P ppm)	L+ (40 K ppm)	A&L MIII	5.2		
1208	CRRFU 11	69	2010-Fa	VH (255 P ppm)	M- (60 K ppm)	A&L MIII	6.8		
1208	CRRFU 12	25	2010-Fa	VH (131 P ppm)	M+ (121 K ppm)	A&L MIII	6.4		
1208	CRRFU 13	24	2010-Fa	H- (65 P ppm)	M- (66 K ppm)	A&L MIII	6.3		
1208	CRRFU 14	15	2010-Fa	VH (161 P ppm)	M- (54 K ppm)	A&L MIII	7.		
1208	CRRFU 15	14	2010-Fa	H (76 P ppm)	M- (55 K ppm)	A&L MIII	5.8		
1208	CRRFU 2	7	2010-Fa	H+ (111 P ppm)	M- (59 K ppm)	A&L MIII	6.2		
1208	CRRFU 3	8	2010-Fa	M+ (43 P ppm)	L (35 K ppm)	A&L MIII	5.4		
1208	CRRFU 4	9	2010-Fa	M- (21 P ppm)	VH (246 K ppm)	A&L MIII	5.4		
1208	CRRFU 5	26	2010-Fa	H+ (107 P ppm)	M (72 K ppm)	A&L MIII	5.7		
1208	CRRFU 6	10	2010-Fa	VH (215 P ppm)	M (82 K ppm)	A&L MIII	7.		
1208	CRRFU 7	13	2010-Fa	VH (153 P ppm)	M (75 K ppm)	A&L MIII	6.2		
1208	CRRFU 8	10	2010-Fa	VH (191 P ppm)	M (72 K ppm)	A&L MIII	6.7		
1208	CRRFU 9	20	2010-Fa	VH (205 P ppm)	M (104 K ppm)	A&L MIII	5.8		
1242	CRRFU 1	13	2010-Fa	M (38 P ppm)	M+ (117 K ppm)	A&L MIII	6.7		
2804	CRRFU 16	23	2010-Fa	H (74 P ppm)	M- (65 K ppm)	A&L MIII	6.7		
2804	CRRFU 17	25	2010-Fa	H- (48 P ppm)	M (88 K ppm)	A&L MIII	5.1		
2804	CRRFU 18	15	2010-Fa	H (77 P ppm)	M (101 K ppm)	A&L MIII	6.4		
2804	CRRFU 19	21	2010-Fa	H (93 P ppm)	M (73 K ppm)	A&L MIII	6.6		
2804	CRRFU 20	39	2010-Fa	H (97 P ppm)	H-(124 K ppm)	A&L MIII	7.2		
2804	CRRFU 21	65	2010-Fa	H (92 P ppm)	M (75 K ppm)	A&L MIII	6.9		
2804	CRRFU 22	9	2010-Fa	H- (60 P ppm)	M (93 K ppm)	A&L MIII	6.6		
2804	CRRFU 23	5	2010-Fa	VH (257 P ppm)	H (152 K ppm)	A&L MIII	6.7		
2804	CRRFU 24	30	2010-Fa	VH (168 P ppm)	M (84 K ppm)	A&L MIII	6.4		
2804	CRRFU 25	33	2010-Fa	VH (216 P ppm)	H (172 K ppm)	A&L MIII	5.7		
2804	CRRFU 26	28	2010-Fa	H+ (102 P ppm)	M+ (109 K ppm)	A&L MIII	6.7		
2804	CRRFU 28	14	2010-Fa	VH (330 P ppm)	H (176 K ppm)	A&L MIII	6.2		
2804	CRRFU27	39	2010-Fa	VH (157 P ppm)	M+ (110 K ppm)	A&L MIII	6.3		

Field Productivities for Major Crops

Tract Name	Tract/Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
1208	1208/14	CRRFU 10*	14	Altavista Bojac1	Ib	IVb	-	III	High Leaching, High Slope
	1208/16,2	CRRFU 11*	69				Not Suited	III	High Leaching
4	1208/18	CRRFU 12	25	Chewacla	IIa	-	Not Suited	-	
	1208/19-	CRRFU 13	24	Chewacla	IIlb	IVb	Not Suited	III	
22	1208/17	CRRFU 14*	15	State1	IIb	-	Not Suited	II	High Leaching
	1208/15	CRRFU 15	14	Slagie	IIb	-	-	-	
	1208/1	CRRFU 2	7	Slagie	IIa	-	-	-	
	1208/2	CRRFU 3	8	Kempsville	IIlb	-	-	-	
	1208/3	CRRFU 4	9	Kempsville	IIa	-	-	-	
	1208/7,8,	CRRFU 5	26	Slagie	IIb	-	-	-	
11,	1208/4	CRRFU 6	10	Kempsville	IIa	-	-	-	
	1208/5,6	CRRFU 7	13	Slagie	IIb	-	-	-	
	1208/10	CRRFU 8	10	Slagie	IIb	-	-	-	
	1208/9,13	CRRFU 9	20	Kempsville	IIa	IVb	Not Suited	III	
1242	1242/1, 2	CRRFU 1	13	Bama	IIa	IVb	-	II	
	2804/6	CRRFU 16	23	Slagie	IIb	-	-	-	
	2804/3,8	CRRFU 17	25	Slagie	IIb	-	-	-	
	2804/7,	CRRFU 18	15	Kempsville	IIa	IVb	-	-	
11	2804/18	CRRFU 19	21	State1	Ib	-	-	-	
	2804/1, 2	CRRFU 20	39	Kempsville	IIa	-	-	-	
	2804/4	CRRFU 21	65	Kempsville	IIa	-	Not Suited	-	
	2804/9	CRRFU 22	9	State1	IIa	-	-	III	High Leaching, High Slope
	2804/13	CRRFU 23*	5	Kempsville	IIlb	-	Not Suited	-	
	2804/19	CRRFU 24	30	State1	Ib	-	-	-	
	2804/14,1	CRRFU 25*	33	State1	IIb	-	-	-	High Leaching
5	2804/5	CRRFU 26	28	Altavista Bojac1	IIa	IVb	-	-	High Leaching, Poor Drain
	2804/17	CRRFU 28*	14				Not	III	

2804/16	CRRFU27*	39	Bojac1		IVb	II		Suited	Not	III	High Leaching
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* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2010 - Winter, 2014

Farm Name: Robert F. Upshaw
Location: Caroline
Specialist: Recyc Systems Inc

Tract Name: 1208
FSA Number: 1208
Location: Caroline

Field Name: CRRFU 10
Total Acres: 14.20 Usable Acres: 14.20
FSA Number: 14
Tract: 1208
Location: Caroline
Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.2	H+(107 P ppm)	L+(40 K ppm)	A&L MIII

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with percent slope in excess of 15%

Field Name: CRRFU 11
Total Acres: 68.50 Usable Acres: 68.50
FSA Number: 16,24
Tract: 1208
Location: Caroline
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

Zero-P

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K Lab
Fa-2010 6.8 VH(255 P ppm) M-(60 K ppm) A&L MIII

Field Warnings:
Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Field Name: CRRFU 12
Total Acres: 25.10 Usable Acres: 25.10
FSA Number: 18
Tract: 1208
Location: Caroline
Slope Class: A Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	M+(121 K ppm)	K	A&L M!!!	Lab
Fa-2010	6.4	VH(131 P ppm)					

Field Warnings:

Field Name: CRRFU 13

Total Acres: 24.10 Usable Acres: 24.10

FSA Number: 19-22

Tract: 1208

Location: Caroline

Slope Class: A Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	M-(66 K ppm)	K	A&L M!!!	Lab
Fa-2010	6.3	H-(65 P ppm)					

Field Warnings:

Field Name: CRRFU 14
Total Acres: 14.60 Usable Acres: 14.60
FSA Number: 17
Tract: 1208
Location: Caroline
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	7.0	VH(161 P ppm)	M-(54 K ppm)	A&L MIII

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Field Name: CRRFU 15
Total Acres: 14.40 Usable Acres: 14.40
FSA Number: 15
Tract: 1208
Location: Caroline
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.8	H(76 P ppm)	M-(55 K ppm)	A&L MII

Field Warnings:

Field Name: CRRFU 2

Total Acres: 7.40

Usable Acres: 7.40

FSA Number: 1

Tract: 1208

Location: Caroline

Slope Class: B

Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.2	H+(111 P ppm)	M-(59 K ppm)	A&L MII

Field Warnings:

Field Name: CRRFU 3
Total Acres: 8.40 Usable Acres: 8.40
FSA Number: 2
Tract: 1208
Location: Caroline
Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K Lab
Fa-2010 5.4 M+(43 P ppm) L(35 K ppm) A&L MIII

Field Warnings:

Field Name: CRRFU 4
Total Acres: 9.40 Usable Acres: 9.40
FSA Number: 3
Tract: 1208
Location: Caroline
Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.4	M-(21 P ppm)	VH(246 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 5

Total Acres: 26.00 Usable Acres: 26.00

FSA Number: 7,8,11,12

Tract: 1208

Location: Caroline

Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.7	H+(107 P ppm)	M(72 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 6

Total Acres: 9.80 Usable Acres: 9.80

FSA Number: 4

Tract: 1208 Location: Caroline Hydrologic Group: B
Slope Class: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	M(82 K ppm)	A&L MIII
Fa-2010	7.0	VH(215 P ppm)			

Field Warnings:

Field Name: CRRFU 7
Total Acres: 12.50 **Usable Acres:** 12.50
FSA Number: 5,6
Tract: 1208
Location: Caroline
Slope Class: A **Hydrologic Group:** C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K
Fa-2010 6.2 VH(153 P ppm) M(75 K ppm) A&L MIII

Lab

Field Warnings:

Field Name: CRRFU 8
Total Acres: 10.20 Usable Acres: 10.20
FSA Number: 10
Tract: 1208
Location: Caroline
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)
P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K
Fa-2010 6.7 VH(191 P ppm) M(72 K ppm) A&L MIII

Field Warnings:

Field Name: CRRFU 9
Total Acres: 20.40 Usable Acres: 20.40
FSA Number: 9,13
Tract: 1208
Location: Caroline
Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.8	VH(205 P ppm)	M(104 K ppm)	A&L MIII

Field Warnings:

Tract Name: 1242

FSA Number: 1242

Location: Caroline

Field Name: CRRFU 1

Total Acres: 13.00 Usable Acres: 13.00

FSA Number: 1, 2

Tract: 1242

Location: Caroline

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	
Fa-2010	6.7	M(38 P ppm)	M+(117 K ppm)	A&L MIII

Field Warnings:

Tract Name:	2803	
FSA Number:	2803	
Location:	Caroline	

Tract Name:	2804	
FSA Number:	2804	
Location:	Caroline	

Field Name:	CRRFU 16		
Total Acres:	22.70	Usable Acres:	22.70
FSA Number:	6		
Tract:	2804		
Location:	Caroline		
Slope Class:	A	Hydrologic Group:	C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:	DATE	PH	P	K	
	Fa-2010	6.7	H(74 P ppm)	M-(65 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 17

Total Acres: 24.60 Usable Acres: 24.60
FSA Number: 3,8
Tract: 2804 Location: Caroline
Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	5.1	H-(48 P ppm)	M(88 K ppm)	A&L Mill

Field Warnings:

Field Name: CRRFU 18
Total Acres: 14.70 Usable Acres: 14.70
FSA Number: 7,11
Tract: 2804 Location: Caroline
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.4	H(77 P ppm)	M(101 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 19

Total Acres: 20.50 Usable Acres: 20.50

FSA Number: 18

Tract: 2804

Location: Caroline

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.6	H(93 P ppm)	M(73 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 20

Total Acres: 39.10 Usable Acres: 39.10

FSA Number: 1, 2

Tract: 2804

Location: Caroline

Slope Class: A Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	
Fa-2010	7.2	H(97 P ppm)	H-(124 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 21

Total Acres: 64.60 Usable Acres: 64.60

FSA Number: 4

Tract: 2804

Location: Caroline

Slope Class: A Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	
Fa-2010	6.9	H(92 P ppm)	M(75 K ppm)	A&L MIII

Field Warnings:

Field Name:	CRRFU 22
Total Acres:	9.10
FSA Number:	9
Tract:	2804
Location:	Caroline
Slope Class:	A
	Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	A&L Mill
Fa-2010	6.6	H-(60 P ppm)	M(93 K ppm)	Lab

Field Warnings:

Field Name:	CRRFU 23
Total Acres:	4.60
FSA Number:	13
Tract:	2804
Location:	Caroline
Slope Class:	D
	Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

Zero-P

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.7	VH(257 P ppm)	H(152 K ppm)	A&L MIII

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with percent slope in excess of 15%

Field Name: CRRFU 24

Total Acres: 30.20 Usable Acres: 30.20

FSA Number: 19

Tract: 2804

Location: Caroline

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab

Fa-2010 6.4 VH(168 P ppm) M(84 K ppm) A&L MIII

Field Warnings:

Field Name: CRRFU 25
Total Acres: 32.50 **Usable Acres:** 32.50
FSA Number: 14.15
Tract: 2804 **Location:** Caroline
Slope Class: A **Hydrologic Group:** B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K
Fa-2010 5.7 VH(216 P ppm) H(172 K ppm) A&L MIII
Lab

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Field Name: CRRFU 26
Total Acres: 28.20 **Usable Acres:** 28.20
FSA Number: 5
Tract: 2804 **Location:** Caroline
Slope Class: A **Hydrologic Group:** C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.7	H+(102 P ppm)	M+(109 K ppm)	A&L MIII

Field Warnings:

Field Name: CRRFU 28

Total Acres: 13.80 Usable Acres: 13.80

FSA Number: 17

Tract: 2804

Location: Caroline

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

Zero-P

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Fa-2010	6.2	VH(330 P ppm)	H(176 K ppm)	A&L MIII

Field Warnings:
Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with high potential for subsurface lateral flow based on soil texture and poor drainage

Field Name: CRRFU27
Total Acres: 39.40 Usable Acres: 39.40
FSA Number: 16
Tract: 2804
Location: Caroline
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:
DATE PH P K Lab
Fa-2010 6.3 VH(157 P ppm) M+(110 K ppm) A&L MII

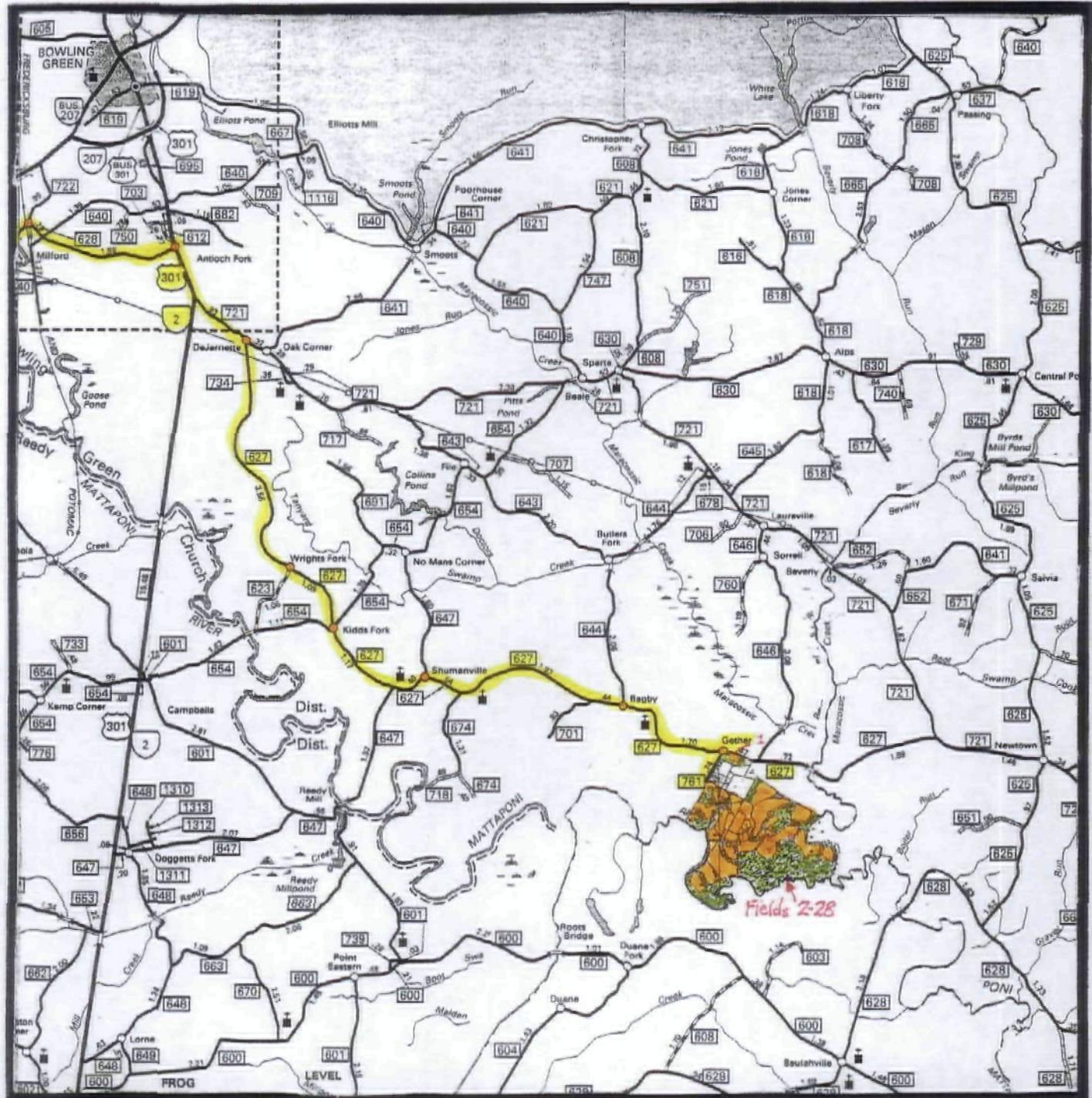
Field Warnings:
Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

MAPS

Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 2 miles

CRRFU 1-28

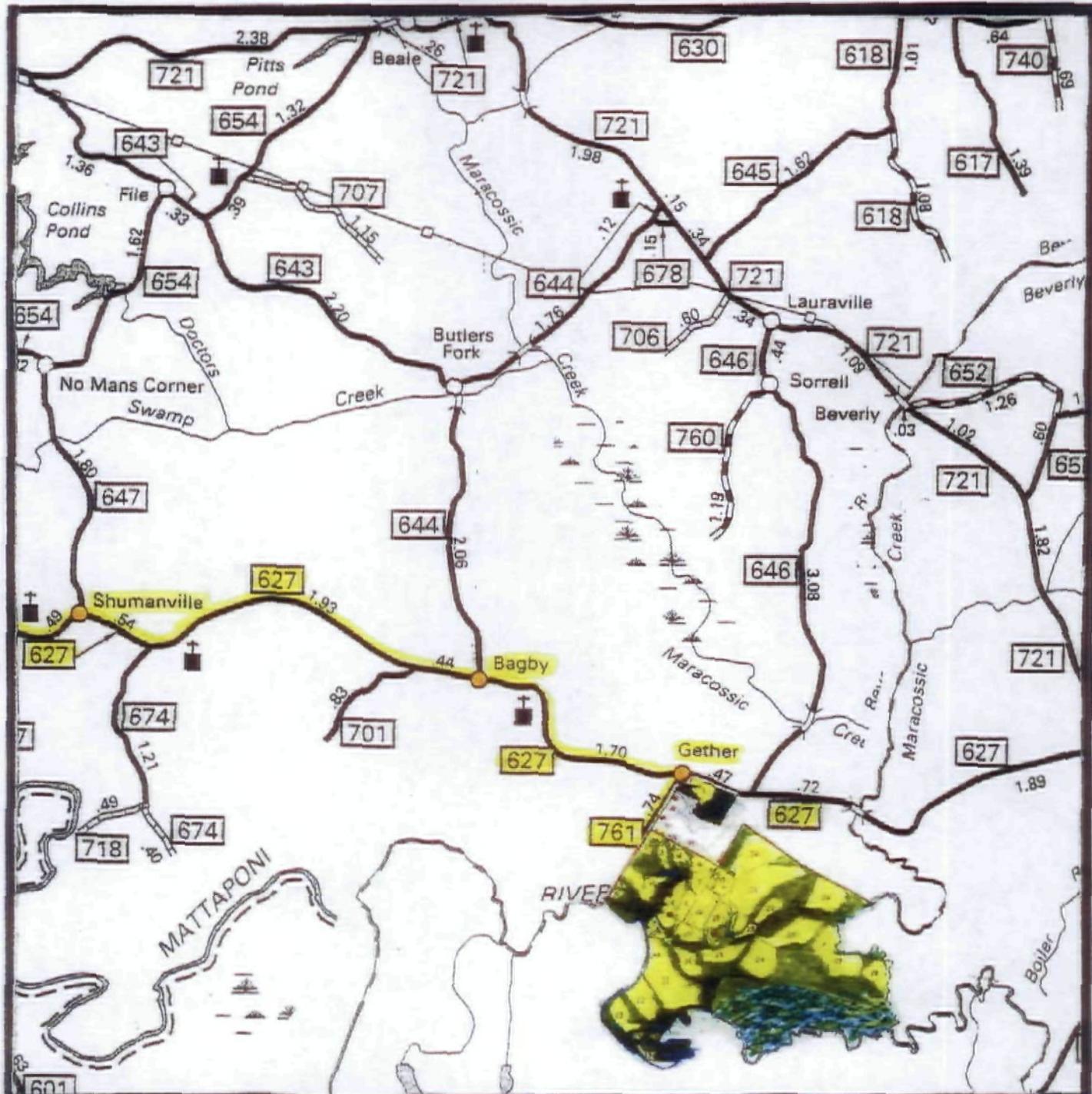
VICINITY MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 1 mile

CRRFU 1-28

VICINITY MAP

N

Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 2000'

CRRFU 1-28

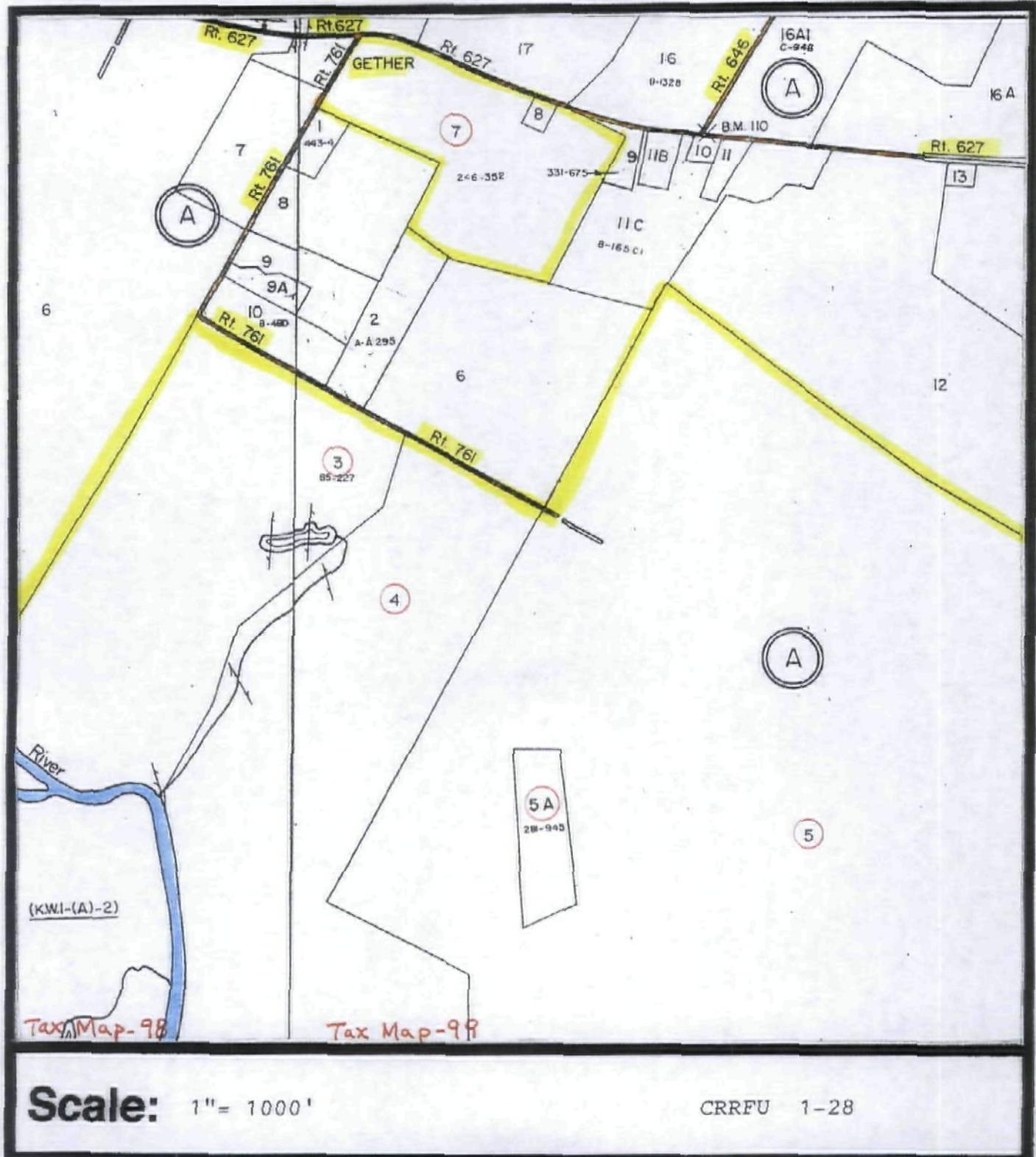
TAX MAP



Recyc Systems™

Inc.

(Biosolids Land Application)



TAX MAP



ADJOINING LANDOWNERS

Robert F. Upshaw

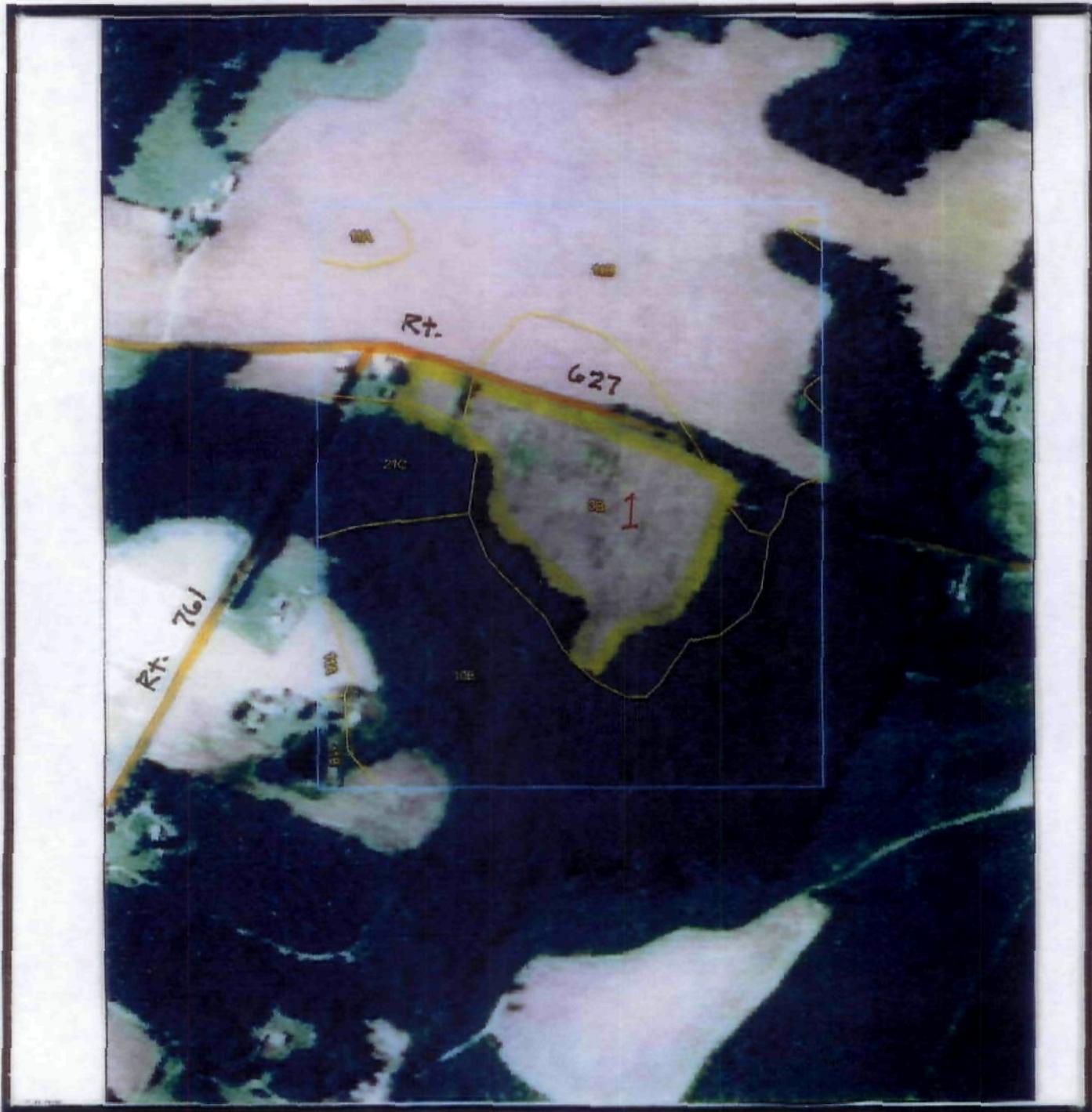
CAROLINE COUNTY

Tax Map	Parcel #	Owner Name(s)
98	6	Woodford B. and Jean Broaddus et als
	7	Woodford B. and Jean Broaddus et als
	8	Lynwood D. Broddus et als C/O Camilla Wood Life est
	9	Robert W. and Betty M. Rohm
	9A	Wayne L. and Sylvia M. Rohm
	10	Michael W. and Anita P. Alsop
	12	Robert Upshaw et als
	17	Edwin T. Upshaw III Trustee and Sallie Upshaw
99	1	Gary L. Payne
	2	Jeffrey W. Smith
	3	Robert D. Upshaw et als
	4	Robert D. Upshaw et als
	5	Robert F. Upshaw, Jr. Farming Assoc. Inc
	5A	Robert F. and Virginia L. Upshaw
	6	Henry W and Zelma Chenault
	7	Robert Dwain Upshaw
	8	Robert Dwain Upshaw
	9	Janet L. Ferguson
	11C	Henry W. and Zelma Chesnault
	12	Robert Upshaw et als
	17	Edwin T. Upshaw Trustee and Sallie Upshaw

Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 500'

CRRFU 1

SOIL MAP



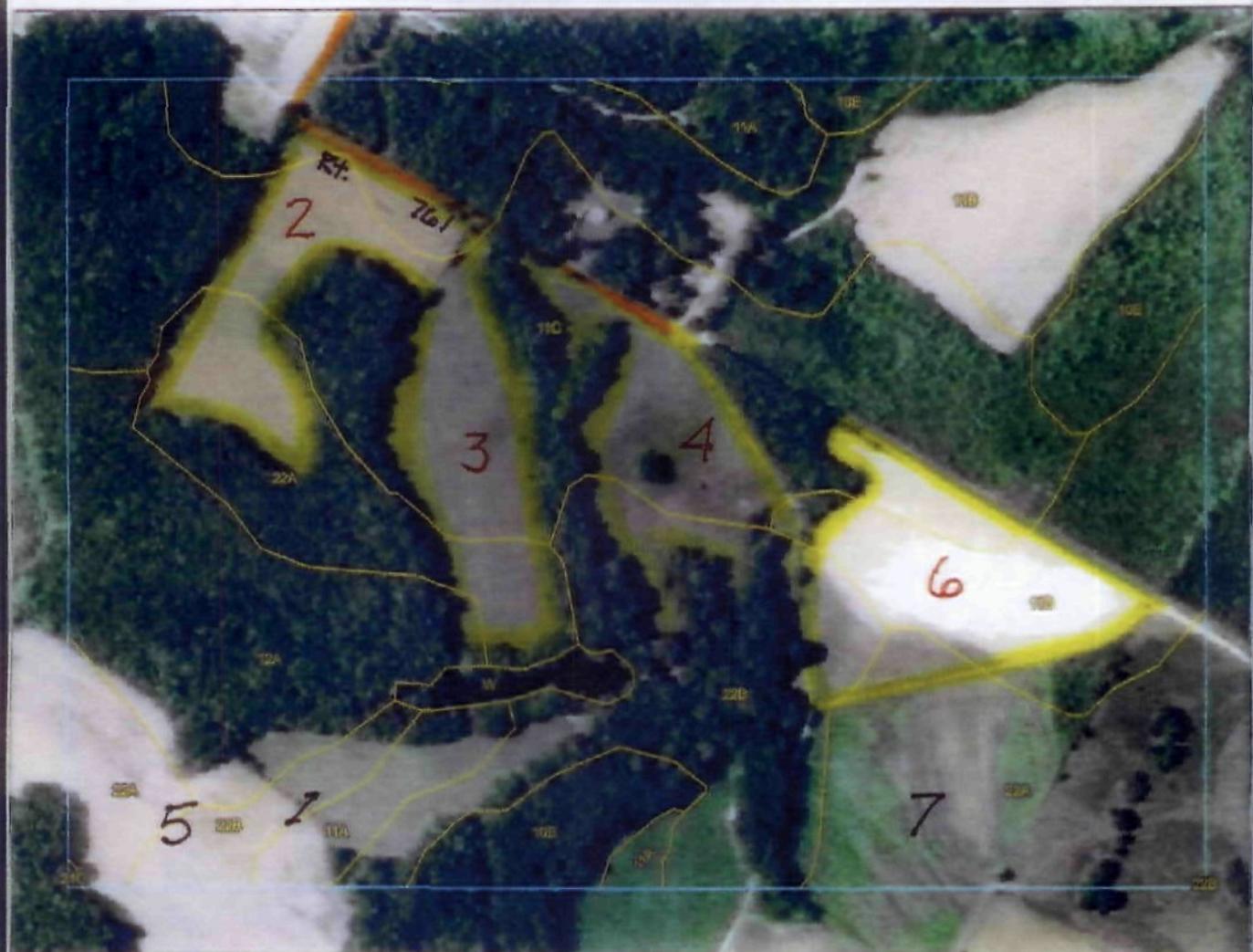
Recyc SystemsTM

Inc.

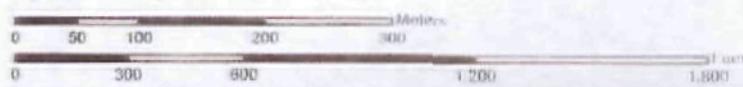
(Biosolids Land Application)



Soil Map—Caroline County, Virginia



Map Scale: 1:6,000 is printed on a 8.5" x 11" sheet.



Scale: 1" = 500'

CRRFU 2-4, 6

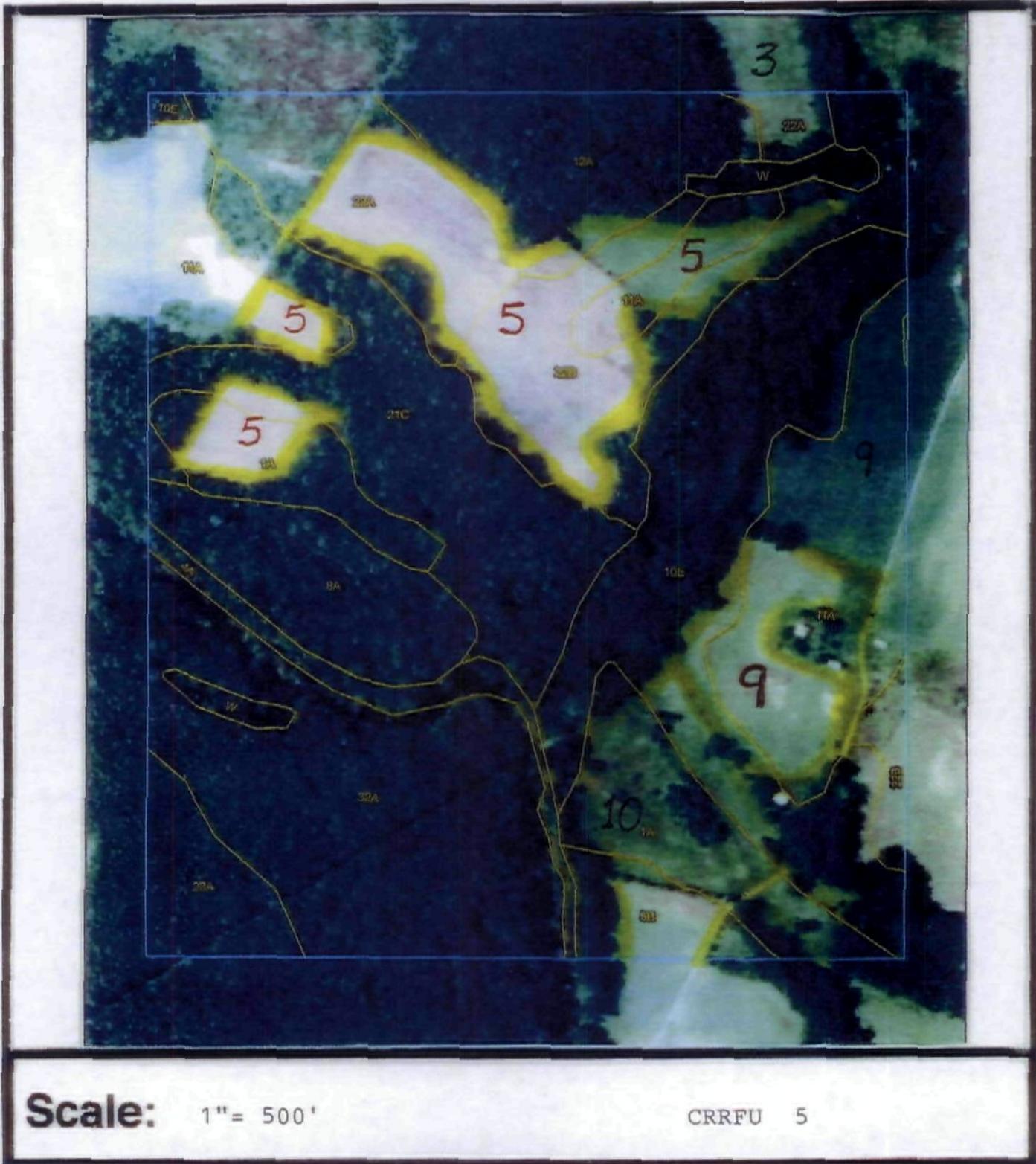
SOIL MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



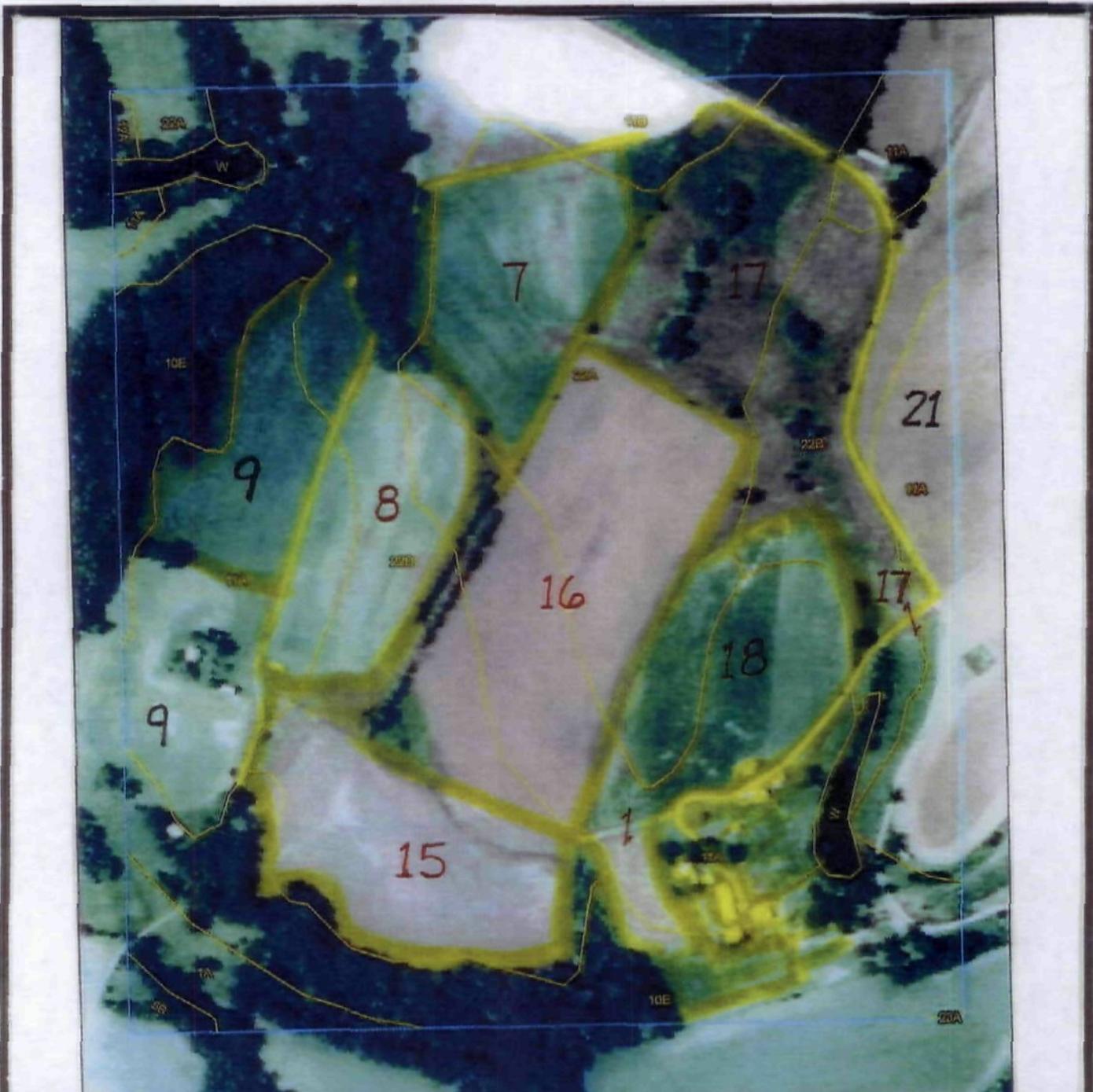
SOIL MAP

N
A

Recyc SystemsTM

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(Biosolids Land Application)



Scale: 1" = 500'

CRRFU 7-8, 15-18

SOIL MAP



Recyc Systems™

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(Biosolids Land Application)



Scale: 1" = 500'

CRRFU 11, 14

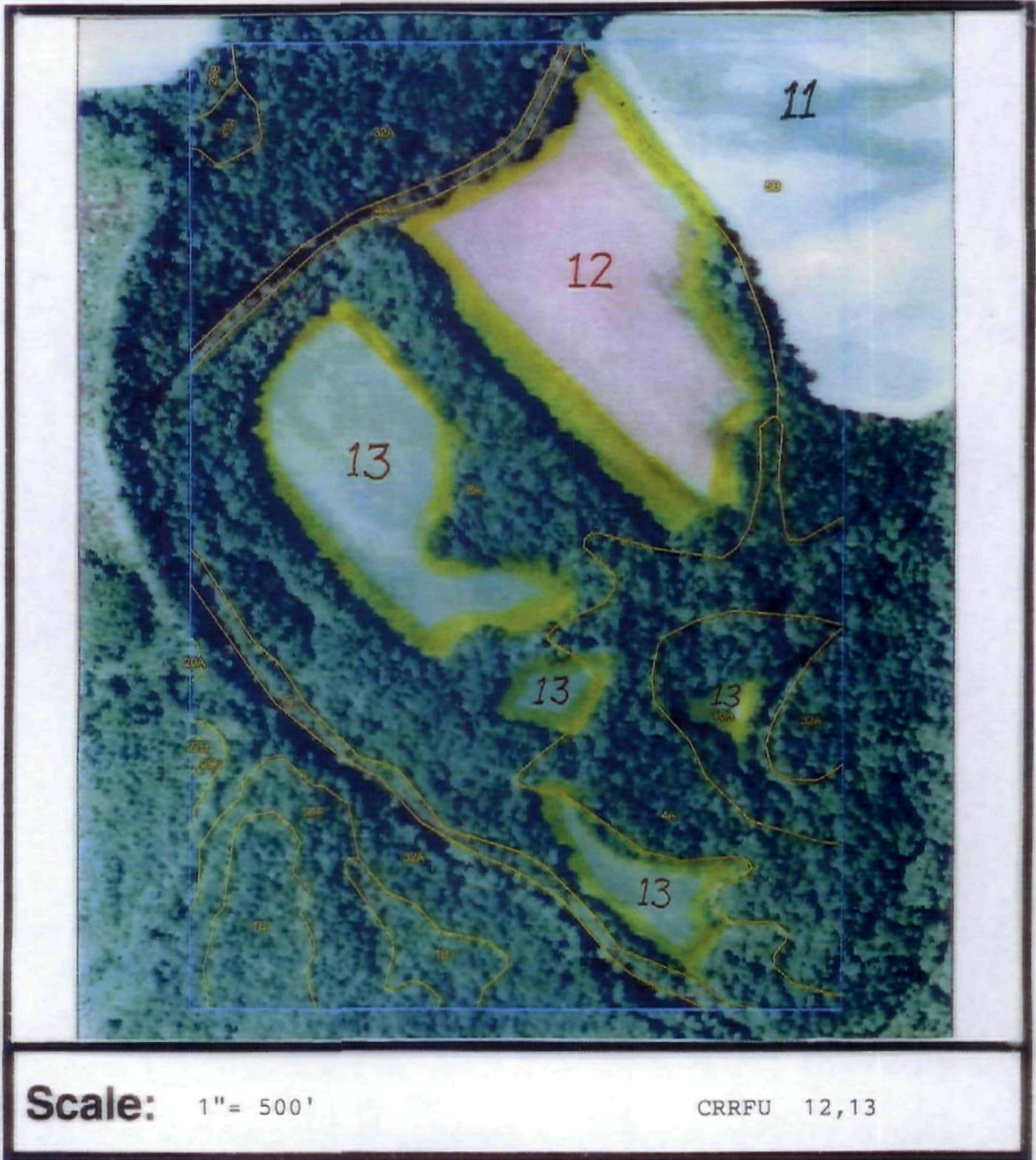
SOIL MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



SOIL MAP



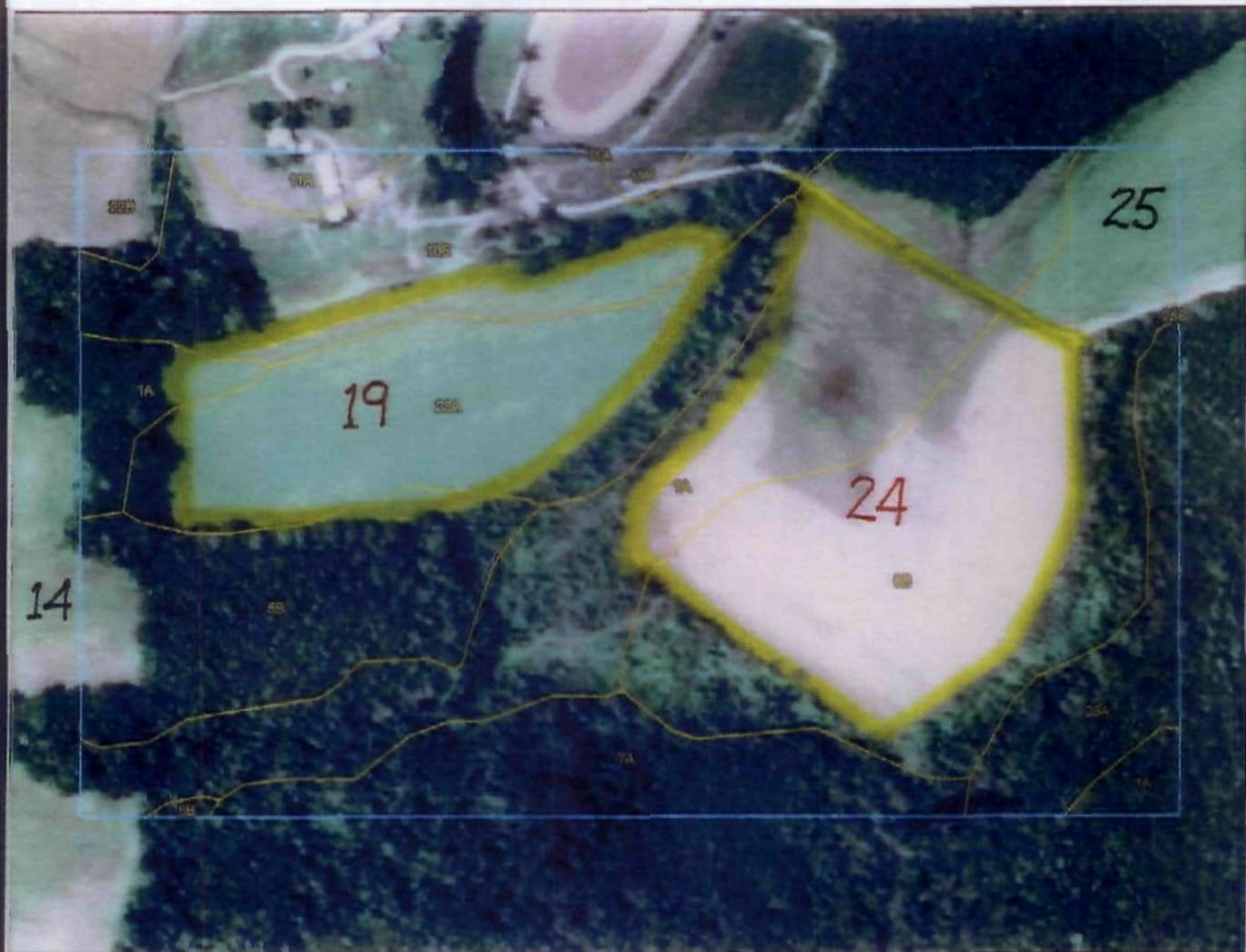
Recyc SystemsTM

Inc.

(Biosolids Land Application)



Soil Map—Caroline County, Virginia



Map Scale: 1:6,000 if printed on A size (8.5" x 11") sheet.

0 50 100 200 300 Meters

0 300 600 1,200 1,800 Feet

Scale: 1" = 500'

CRRFU 19, 24

SOIL MAP



Recyc Systems™

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(Biosolids Land Application)



Scale: 1" = 500'

CRRFU 20

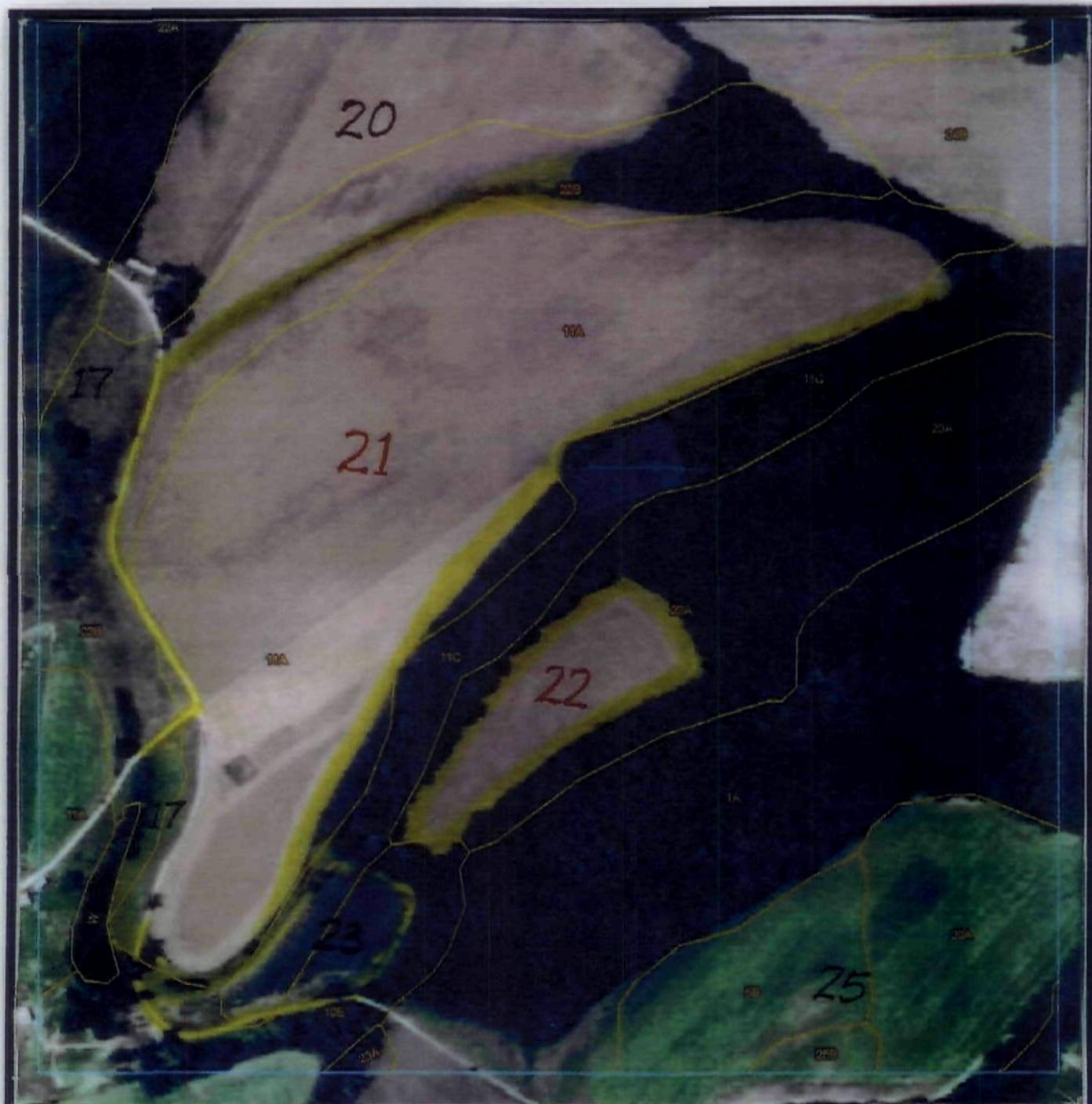
SOIL MAP



Recyc Systems™

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(Biosolids Land Application)



Scale: 1" = 500'

CRRFU 21, 22

SOIL MAP



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(Biosolids Land Application)



Soil Map—Caroline County, Virginia, and King and Queen County, Virginia



Map Scale: 1:6,000 if printed on A-size (8.5" x 11") sheet.

0 50 100 150 200 250 Meters

0 300 600 Feet

1,200 1,800

Scale: 1" = 500'

CRRFU 25, 27

SOIL MAP



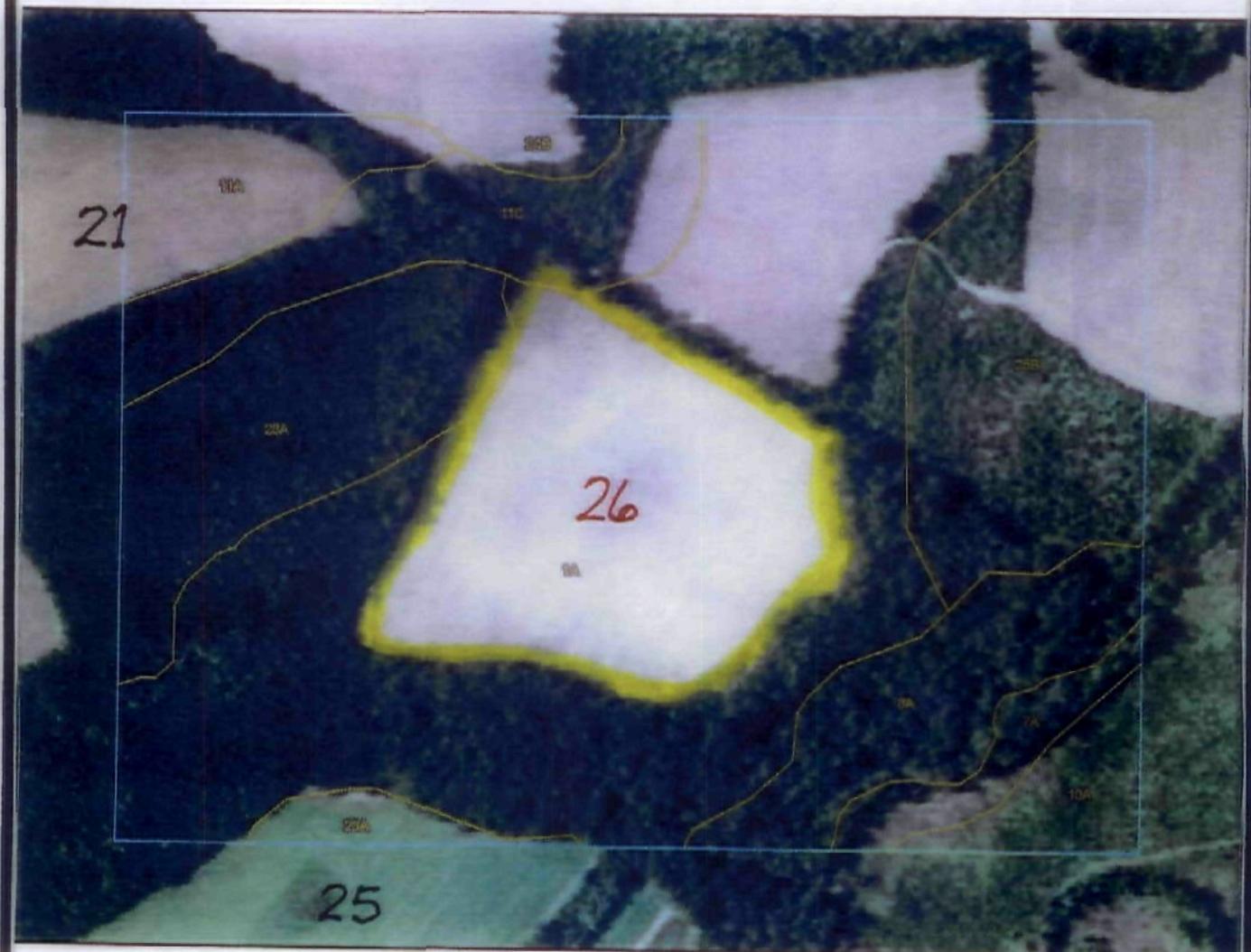
Recyc SystemsTM

Inc.

(Biosolids Land Application)



Soil Map—Caroline County, Virginia, and King and Queen County, Virginia



Map Scale: 1:6,000 if printed on A size (8.5" x 11") sheet

Meters				
0	50	100	200	300
0	300	600	1,200	1,800

Scale: 1" = 500'

CRRFU 26

SOIL MAP



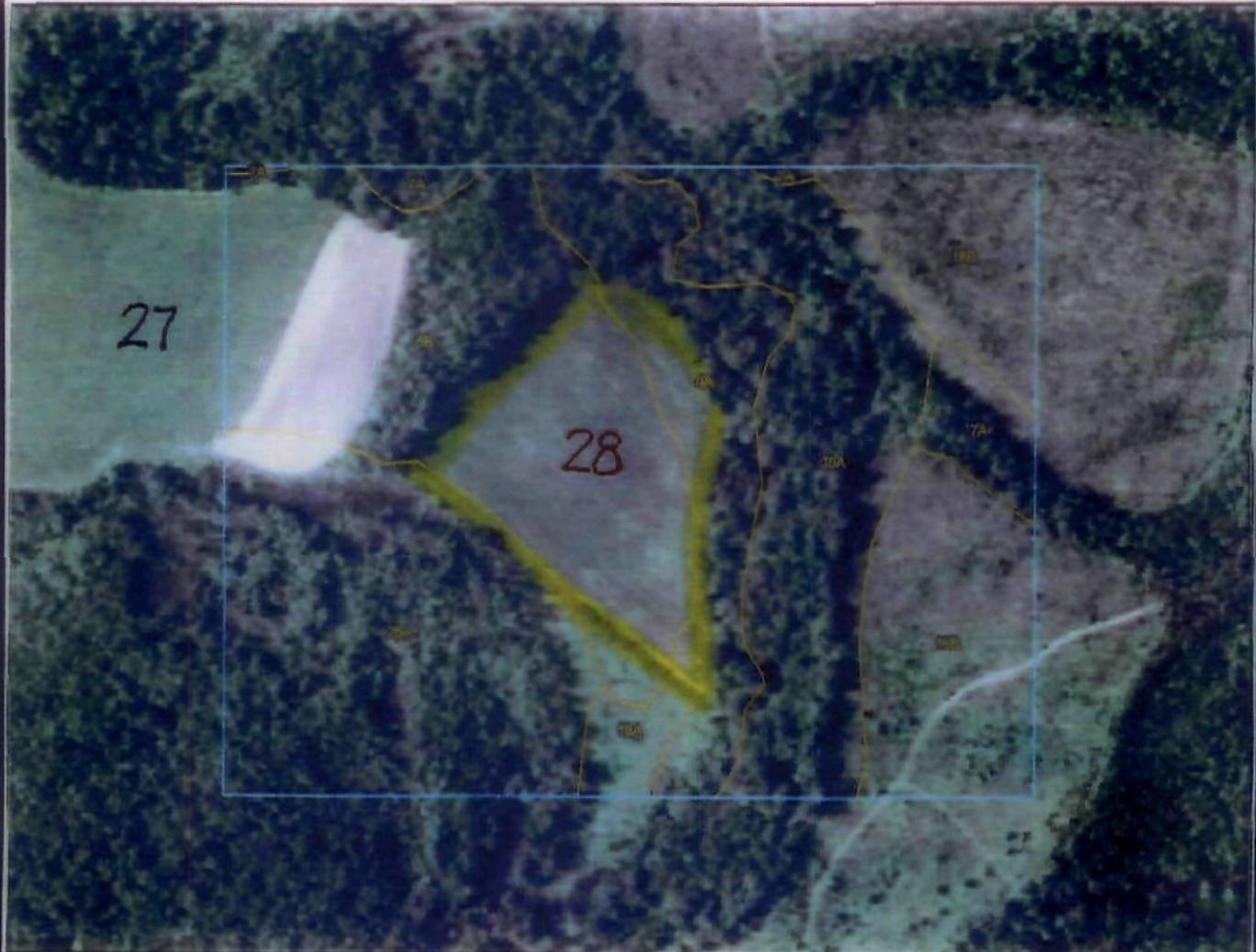
Recyc SystemsTM

Inc.

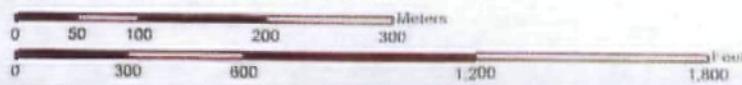
(Biosolids Land Application)



Soil Map—Caroline County, Virginia, and King and Queen County, Virginia



Map Scale: 1:6,000 if printed on A-size (8.5" x 11") sheet



Scale: 1" = 500'

CRRFU 28

SOIL MAP



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(Biosolids Land Application)



United States Department of Agriculture
Farm Service Agency

Grid:

CAROLINE COUNTY

1:4,959

Producer
Date



F-2585
T-1242

Scale: 1" = 500'

CRRFU 1

AERIAL MAP



Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 2-10,15-18

AERIAL MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 11-14

AERIAL MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

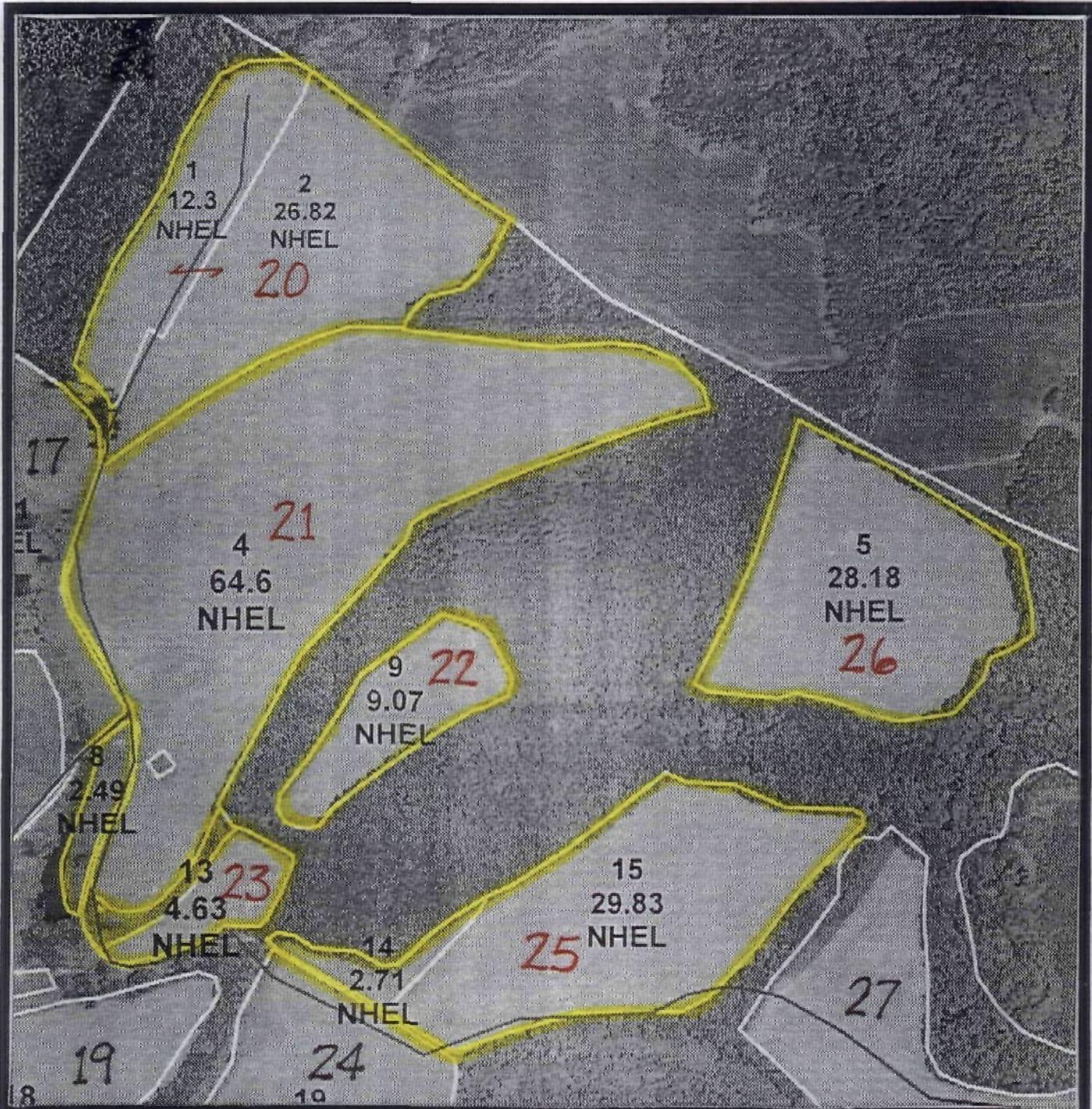
CRRFU 18-19, 22-25

AERIAL MAP



Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 20-23, 25-26

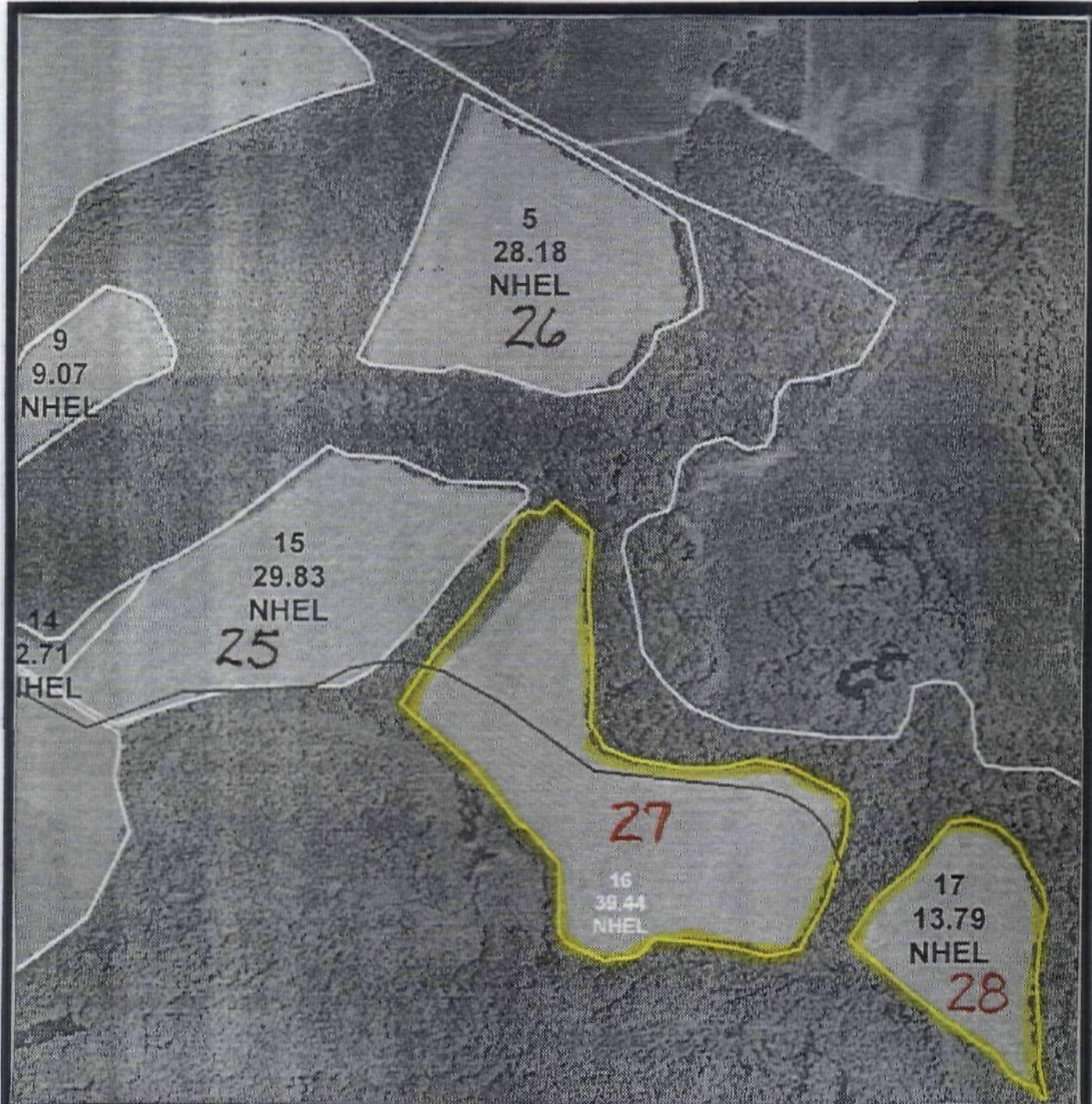
AE^{RIAL MAP}



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 27, 28

AERIAL MAP



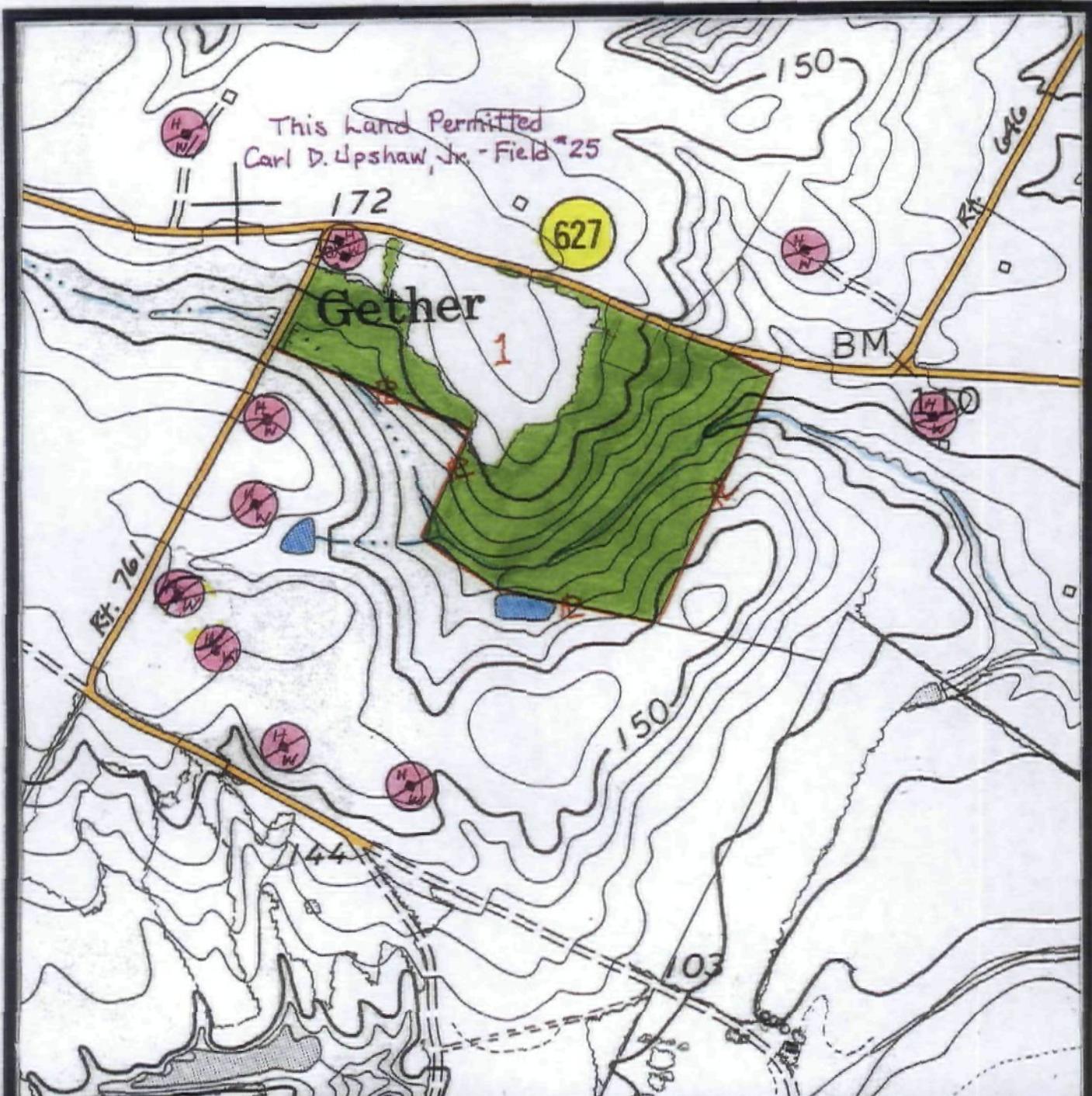
Legend for Site Plan

	House and Well
	Well / Spring
	Perennial Streams & Surface
	Wet Spot
	Intermittent Stream / Drainage
	Trees and Woods
	Private Drive
	Rock / Rocky Area
	Sinkhole
	Severely Eroded Spot
	State Road
	Field Boundary / Fence
	Property Line
	Slope
	Frequent Flooded Soil

Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 1

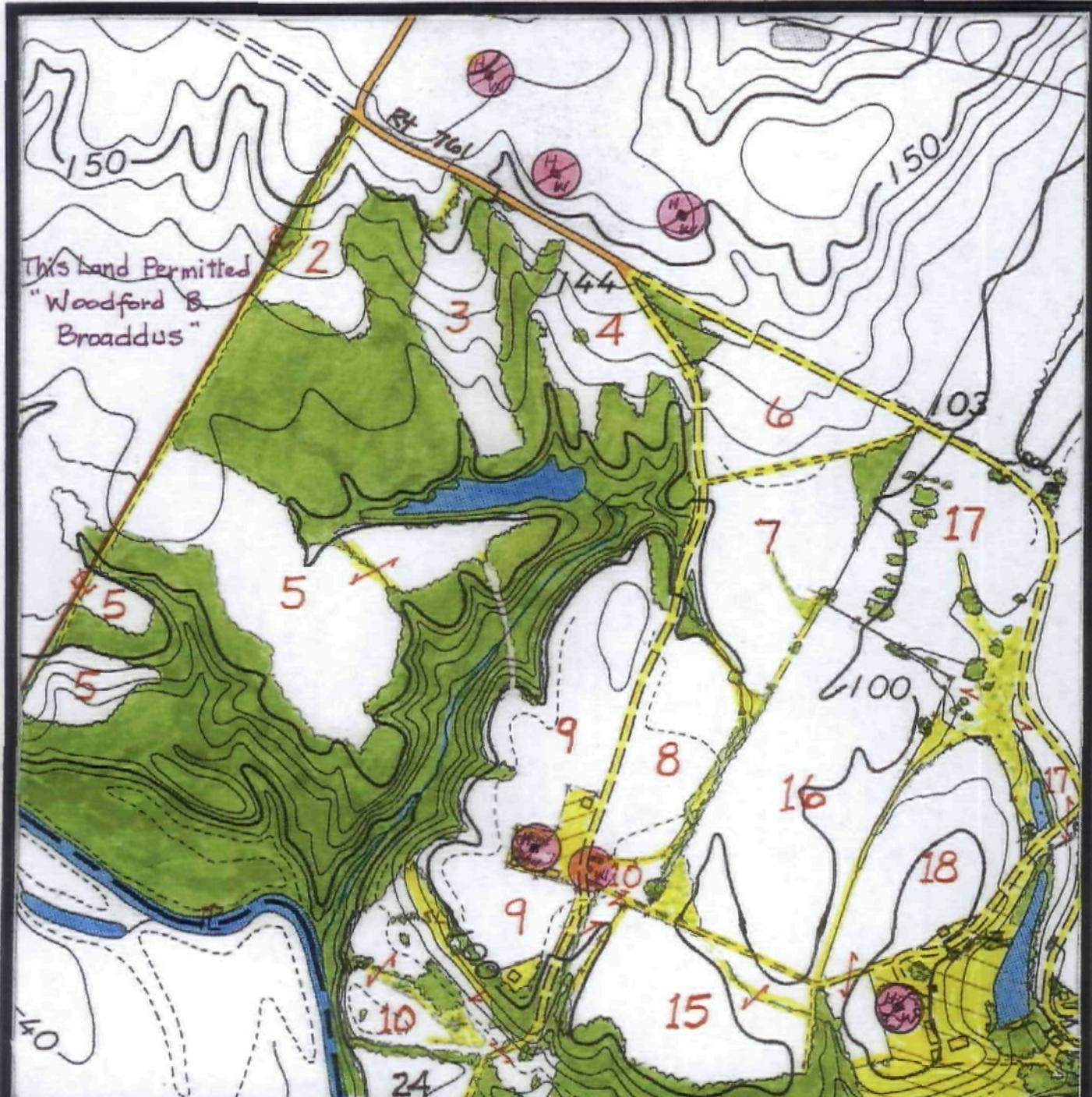
SITE PLAN



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 2-10,15-18

SITE PLAN



Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 11-14

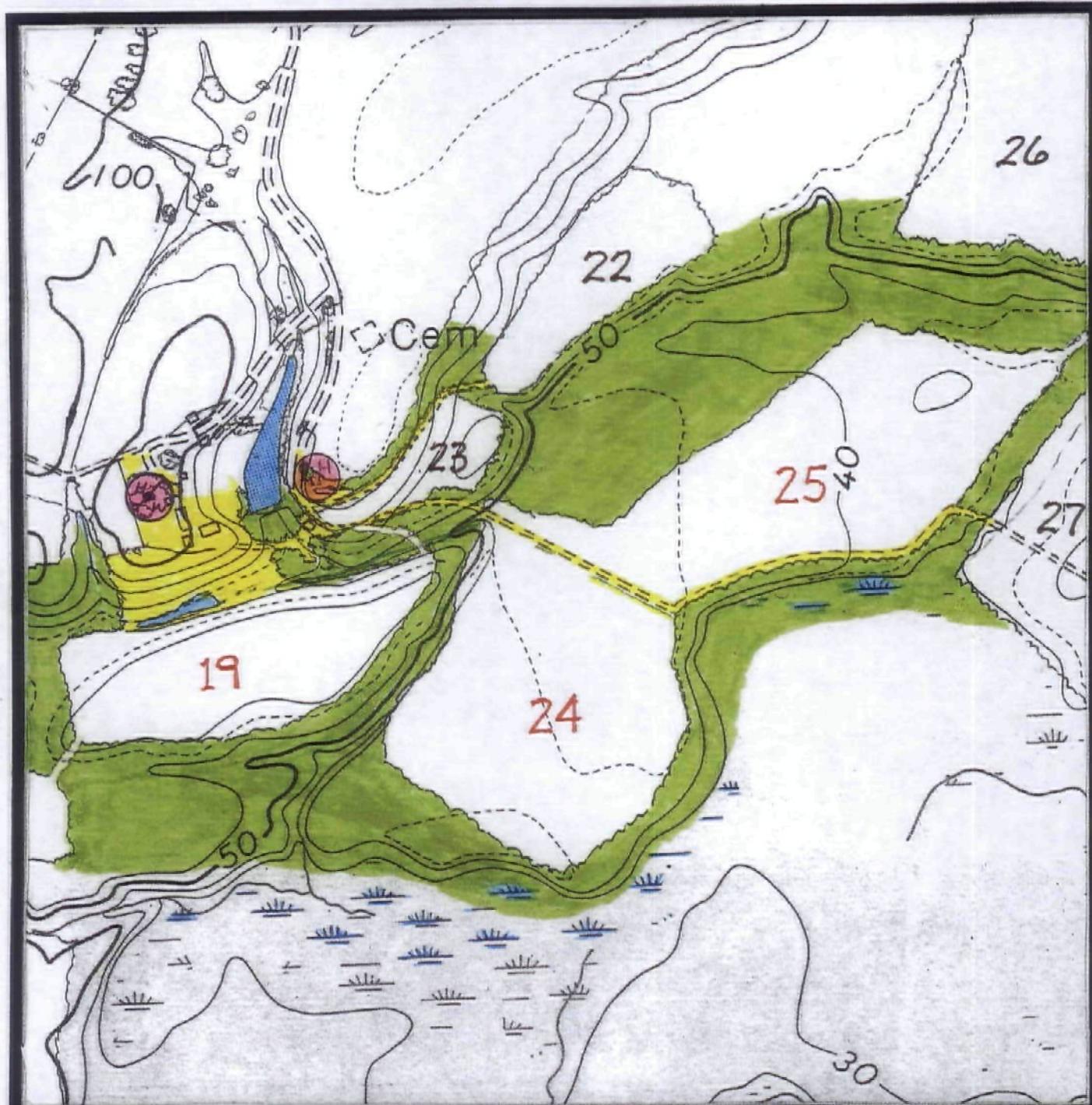
SITE PLAN



Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 19, 24-25

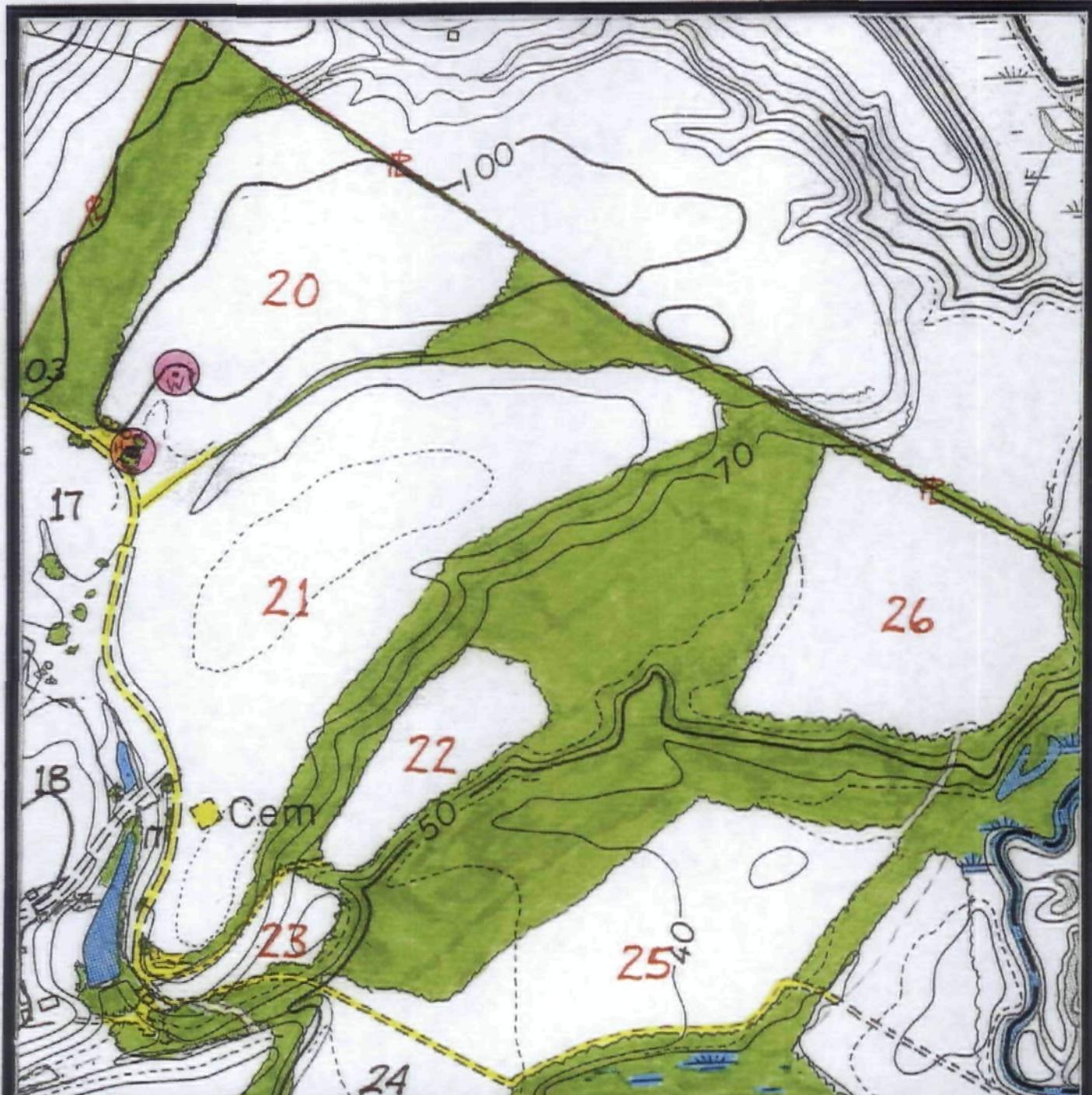
SITE PLAN



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

CRRFU 20-23, 25-26

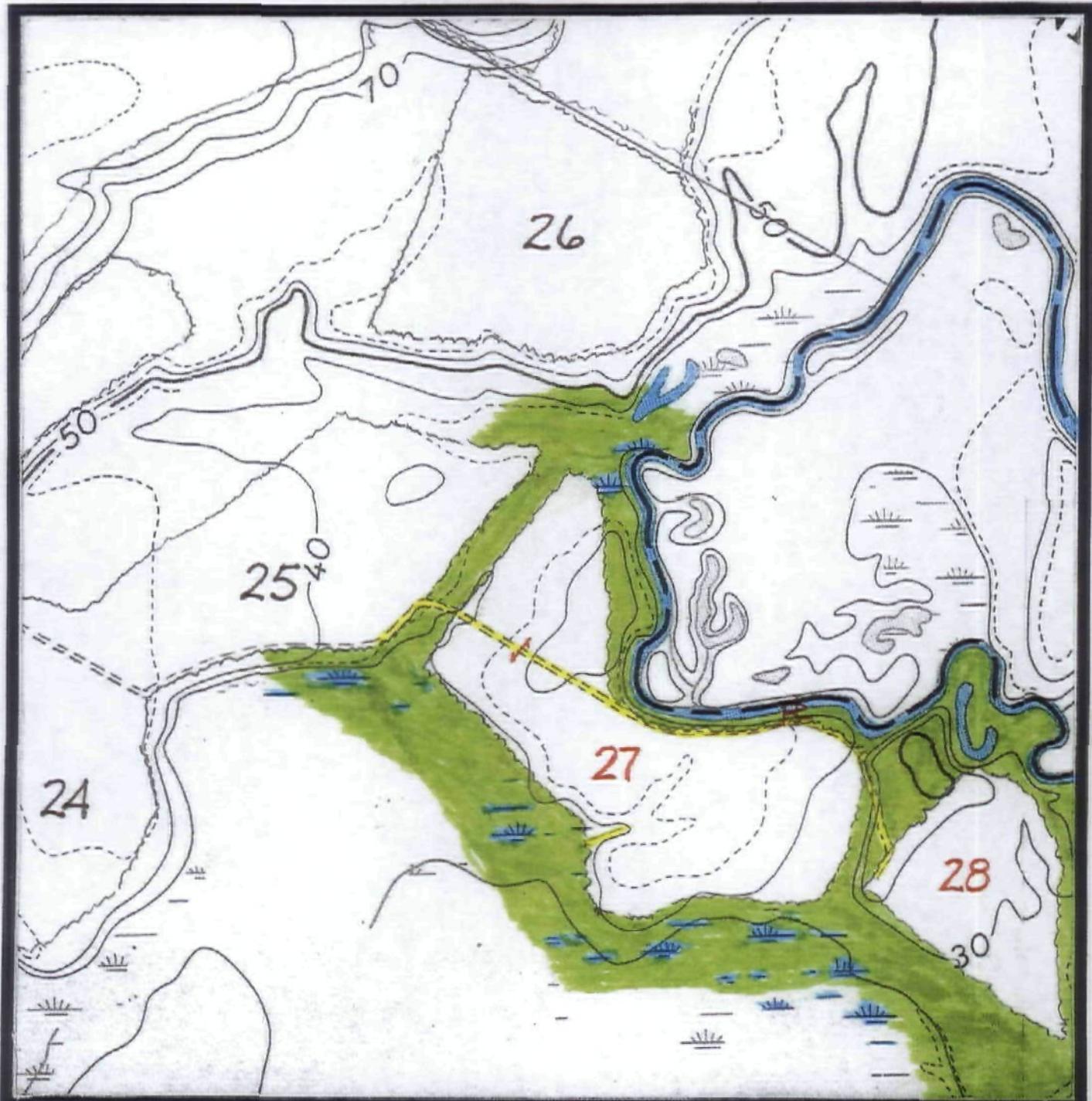
SITE PLAN



Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 660'

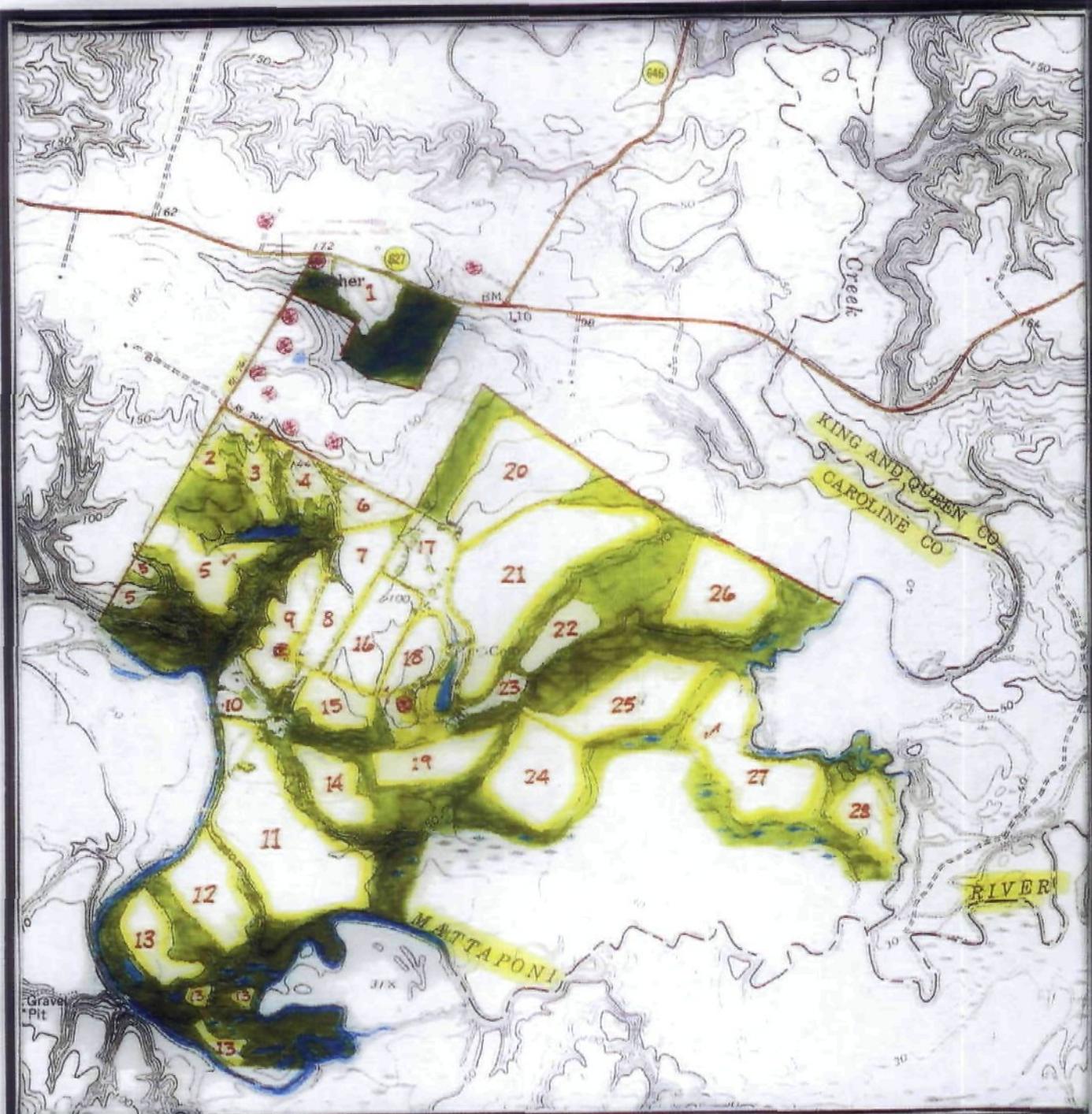
CRRFU 27,28

SITE PLAN



Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 2000'

CRRFU 1-28

AE^{RIAL MAP}

